

FSCE-STYLE 11+ HARD PRACTICE BOOK

400+ PAGE KS3-BRIDGE EDITION

All Wider KS2 Subjects • Hard Applied Thinking • Diagrams • Geometry • Creative Response



Independent resource - not official or endorsed by FSCE Ltd or any school

How to Use This Hard 400+ Page Book

This book is designed as a harder, KS3-bridge level extension for strong 11+ candidates. It keeps the broad multi-subject spirit of FSCE-style preparation while making the questions more demanding, visual and applied.

- Every subject chapter includes high-level vocabulary, diagram interpretation, Adventure-style multiple choice, Beacon-style short answers, and answers.
- Questions are deliberately harder than foundation practice: more inference, reasoning, elimination and applied judgement are required.
- Visuals include geometry diagrams, charts, flowcharts, maps, timelines, design prototypes, art grids and creative writing picture prompts.
- Use this after a child can already handle basic Year 5/Year 6 curriculum questions.

Difficulty bands used

Band	Meaning
Level 1	Warm-up but still above basic recall
Level 2	Competitive 11+ application
Level 3	Hard inference / multi-step reasoning
Level 4	KS3-bridge stretch challenge

Contents

Chapter	Section
1	English - vocabulary, diagrams, hard Adventure questions, Beacon written answers, answer explanations
2	Mathematics - vocabulary, diagrams, hard Adventure questions, Beacon written answers, answer explanations
3	Science - vocabulary, diagrams, hard Adventure questions, Beacon written answers, answer explanations
4	Computing - vocabulary, diagrams, hard Adventure questions, Beacon written answers, answer explanations
5	Geography - vocabulary, diagrams, hard Adventure questions, Beacon written answers, answer explanations
6	History - vocabulary, diagrams, hard Adventure questions, Beacon written answers, answer explanations
7	Languages - vocabulary, diagrams, hard Adventure questions, Beacon written answers, answer explanations
8	Art & Design - vocabulary, diagrams, hard Adventure questions, Beacon written answers, answer explanations
9	Design & Technology - vocabulary, diagrams, hard Adventure questions, Beacon written answers, answer explanations
10	Music - vocabulary, diagrams, hard Adventure questions, Beacon written answers, answer explanations
11	Physical Education - vocabulary, diagrams, hard Adventure questions, Beacon written answers, answer explanations
12	Creative Writing Masterclass - picture prompts, object prompts, poems, story planning and sentence banks
13	Full Mixed Hard Mock Papers
14	Reusable answer sheets, progress trackers and correction logs

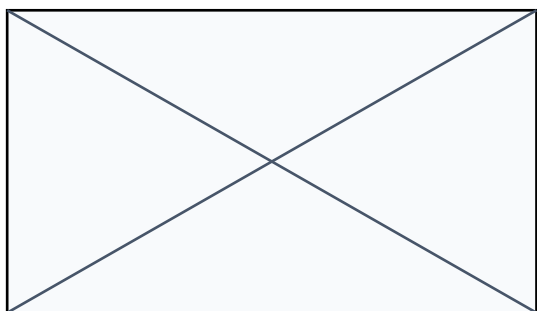
Chapter 1: English - Hard KS3-Bridge Practice

This chapter trains advanced 11+ thinking in English. The focus is not simple memory; the questions require interpretation, evidence, diagrams, comparison and precise explanation.

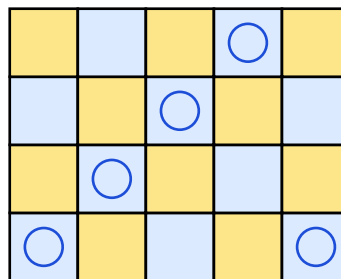
Subject skill map

- Understand and use specialist English vocabulary precisely.
- Interpret diagrams, charts, tables or visual evidence.
- Eliminate tempting but weaker answer choices.
- Write short answers using exact terminology.
- Explain reasoning clearly under timed conditions.

Art stimulus: composition, pattern, contrast and perspective



one-point perspective



repeated motif pattern

English Vocabulary Bank - 35 Hard Words

For each word, learn the meaning and how it might be tested in a hard question.

Word	Meaning	How it is tested / used
infer	Key infer concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
implicit	suggested but not directly stated	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
explicit	directly stated	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
cohesion	how parts link smoothly	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
subordinate clause	Key subordinate clause concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
modal verb	Key modal verb concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
tone	Key tone concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
Word	Meaning	How it is tested / used
viewpoint	Key viewpoint concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
metaphor	Key metaphor concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
personification	Key personification concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
audience	Key audience concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
purpose	Key purpose concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
context	Key context concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
connotation	Key connotation concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
Word	Meaning	How it is tested / used
register	Key register concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
ambiguity	Key ambiguity concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
precision	Key precision concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
contrast	Key contrast concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
imagery	Key imagery concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
atmosphere	Key atmosphere concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
foreshadowing	Key foreshadowing concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
resolution	Key resolution concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
dialogue	Key dialogue concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
narrative voice	Key narrative voice concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
coherent	Key coherent concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
emphasis	Key emphasis concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
ellipsis	Key ellipsis concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
parenthesis	Key parenthesis concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
motif	Key motif concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
symbolism	Key symbolism concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
tension	Key tension concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
pace	Key pace concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
evidence	Key evidence concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
inference	Key inference concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.
justify	Key justify concept used in harder applied questions	Use this term when explaining english reasoning, interpreting a diagram, or writing a precise Beacon answer.

English Vocabulary Application Drill 1

Use the target word accurately in context. Do not write a vague sentence. Your sentence must show the meaning.

1. Target word: infer. Write a precise sentence connected to English.

Sentence: _____

2. Target word: implicit. Write a precise sentence connected to English.

Sentence: _____

3. Target word: explicit. Write a precise sentence connected to English.

Sentence: _____

4. Target word: cohesion. Write a precise sentence connected to English.

Sentence: _____

5. Target word: subordinate clause. Write a precise sentence connected to English.

Sentence: _____

6. Target word: modal verb. Write a precise sentence connected to English.

Sentence: _____

7. Target word: tone. Write a precise sentence connected to English.

Sentence: _____

8. Target word: viewpoint. Write a precise sentence connected to English.

Sentence: _____

9. Target word: metaphor. Write a precise sentence connected to English.

Sentence: _____

10. Target word: personification. Write a precise sentence connected to English.

Sentence: _____

11. Target word: audience. Write a precise sentence connected to English.

Sentence: _____

12. Target word: purpose. Write a precise sentence connected to English.

Sentence: _____

English Vocabulary Application Drill 2

Use the target word accurately in context. Do not write a vague sentence. Your sentence must show the meaning.

1. Target word: context. Write a precise sentence connected to English.

Sentence: _____

2. Target word: connotation. Write a precise sentence connected to English.

Sentence: _____

3. Target word: register. Write a precise sentence connected to English.

Sentence: _____

4. Target word: ambiguity. Write a precise sentence connected to English.

Sentence: _____

5. Target word: precision. Write a precise sentence connected to English.

Sentence: _____

6. Target word: contrast. Write a precise sentence connected to English.

Sentence: _____

7. Target word: imagery. Write a precise sentence connected to English.

Sentence: _____

8. Target word: atmosphere. Write a precise sentence connected to English.

Sentence: _____

9. Target word: foreshadowing. Write a precise sentence connected to English.

Sentence: _____

10. Target word: resolution. Write a precise sentence connected to English.

Sentence: _____

11. Target word: dialogue. Write a precise sentence connected to English.

Sentence: _____

12. Target word: narrative voice. Write a precise sentence connected to English.

Sentence: _____

English Worked Examples - Hard Reasoning

Worked Example 1. Which phrase best shows fear without naming it?

- A. I was very scared.
- B. It was scary.
- C. I did not like it.
- D. My fingers tightened around the handle as my breath caught.

Answer: D. Body reaction shows emotion indirectly.

Worked Example 2. A writer describes a character as 'carefully folding the same letter again and again'. What can be inferred?

- A. The letter is definitely a shopping list.
- B. The character cannot read.
- C. The letter is emotionally important or worrying.
- D. The character enjoys origami only.

Answer: C. Repetition of careful action suggests concern or importance.

Worked Example 3. Which opening is strongest for a controlled mystery?

- A. There was a book.
- B. At first the library seemed ordinary, until one book whispered my name.
- C. I went to a place and something happened.
- D. It was a day.

Answer: B. Normal setting plus impossible detail creates mystery.

Worked Example 4. Which sentence most effectively builds suspense through contrast?

- A. The playground was bright and noisy, but the shed behind it stood silent.
- B. The playground was bright and noisy and fun.
- C. The shed was old and brown.
- D. I went to the playground.

Answer: A. The contrast between noise and silence creates tension.

English Adventure Set 1 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. English. Which phrase best shows fear without naming it?

- A. I was very scared.
- B. It was scary.
- C. I did not like it.
- D. My fingers tightened around the handle as my breath caught.

Q2. English. A writer describes a character as 'carefully folding the same letter again and again'. What can be inferred?

- A. The letter is definitely a shopping list.
- B. The character cannot read.
- C. The letter is emotionally important or worrying.
- D. The character enjoys origami only.

Q3. English. Which opening is strongest for a controlled mystery?

- A. There was a book.
- B. At first the library seemed ordinary, until one book whispered my name.
- C. I went to a place and something happened.
- D. It was a day.

Q4. English. Which sentence most effectively builds suspense through contrast?

- A. The playground was bright and noisy, but the shed behind it stood silent.
- B. The playground was bright and noisy and fun.
- C. The shed was old and brown.
- D. I went to the playground.

Q5. English. Which phrase best shows fear without naming it?

- A. I was very scared.
- B. It was scary.
- C. I did not like it.
- D. My fingers tightened around the handle as my breath caught.

Q6. English. A writer describes a character as 'carefully folding the same letter again and again'. What can be inferred?

- A. The letter is definitely a shopping list.
- B. The character cannot read.
- C. The letter is emotionally important or worrying.
- D. The character enjoys origami only.

Q7. English. Which opening is strongest for a controlled mystery?

- A. There was a book.
- B. At first the library seemed ordinary, until one book whispered my name.
- C. I went to a place and something happened.
- D. It was a day.

Q8. English. Which sentence most effectively builds suspense through contrast?

- A. The playground was bright and noisy, but the shed behind it stood silent.
- B. The playground was bright and noisy and fun.
- C. The shed was old and brown.
- D. I went to the playground.

Q9. English. Which phrase best shows fear without naming it?

- A. I was very scared.
- B. It was scary.
- C. I did not like it.
- D. My fingers tightened around the handle as my breath caught.

Q10. English. A writer describes a character as 'carefully folding the same letter again and again'. What can be inferred?

- A. The letter is definitely a shopping list.
- B. The character cannot read.
- C. The letter is emotionally important or worrying.
- D. The character enjoys origami only.

Q11. English. Which opening is strongest for a controlled mystery?

- A. There was a book.
- B. At first the library seemed ordinary, until one book whispered my name.
- C. I went to a place and something happened.
- D. It was a day.

Q12. English. Which sentence most effectively builds suspense through contrast?

- A. The playground was bright and noisy, but the shed behind it stood silent.
- B. The playground was bright and noisy and fun.
- C. The shed was old and brown.
- D. I went to the playground.

English Adventure Set 2 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. English. Which phrase best shows fear without naming it?

- A. I was very scared.
- B. It was scary.
- C. I did not like it.
- D. My fingers tightened around the handle as my breath caught.

Q2. English. A writer describes a character as 'carefully folding the same letter again and again'. What can be inferred?

- A. The letter is definitely a shopping list.
- B. The character cannot read.
- C. The letter is emotionally important or worrying.
- D. The character enjoys origami only.

Q3. English. Which opening is strongest for a controlled mystery?

- A. There was a book.
- B. At first the library seemed ordinary, until one book whispered my name.
- C. I went to a place and something happened.
- D. It was a day.

Q4. English. Which sentence most effectively builds suspense through contrast?

- A. The playground was bright and noisy, but the shed behind it stood silent.
- B. The playground was bright and noisy and fun.
- C. The shed was old and brown.
- D. I went to the playground.

Q5. English. Which phrase best shows fear without naming it?

- A. I was very scared.
- B. It was scary.
- C. I did not like it.
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- A. The letter is definitely a shopping list.
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- C. The letter is emotionally important or worrying.
- D. The character enjoys origami only.

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- C. I went to a place and something happened.
- D. It was a day.

Q8. English. Which sentence most effectively builds suspense through contrast?

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- B. The playground was bright and noisy and fun.
- C. The shed was old and brown.
- D. I went to the playground.

Q9. English. Which phrase best shows fear without naming it?

- A. I was very scared.
- B. It was scary.
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Q10. English. A writer describes a character as 'carefully folding the same letter again and again'. What can be inferred?

- A. The letter is definitely a shopping list.
- B. The character cannot read.
- C. The letter is emotionally important or worrying.
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Q11. English. Which opening is strongest for a controlled mystery?

- A. There was a book.
- B. At first the library seemed ordinary, until one book whispered my name.
- C. I went to a place and something happened.
- D. It was a day.

Q12. English. Which sentence most effectively builds suspense through contrast?

- A. The playground was bright and noisy, but the shed behind it stood silent.
- B. The playground was bright and noisy and fun.
- C. The shed was old and brown.
- D. I went to the playground.

English Adventure Set 3 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. English. Which phrase best shows fear without naming it?

- A. I was very scared.
- B. It was scary.
- C. I did not like it.
- D. My fingers tightened around the handle as my breath caught.

Q2. English. A writer describes a character as 'carefully folding the same letter again and again'. What can be inferred?

- A. The letter is definitely a shopping list.
- B. The character cannot read.
- C. The letter is emotionally important or worrying.
- D. The character enjoys origami only.

Q3. English. Which opening is strongest for a controlled mystery?

- A. There was a book.
- B. At first the library seemed ordinary, until one book whispered my name.
- C. I went to a place and something happened.
- D. It was a day.

Q4. English. Which sentence most effectively builds suspense through contrast?

- A. The playground was bright and noisy, but the shed behind it stood silent.
- B. The playground was bright and noisy and fun.
- C. The shed was old and brown.
- D. I went to the playground.

Q5. English. Which phrase best shows fear without naming it?

- A. I was very scared.
- B. It was scary.
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- D. My fingers tightened around the handle as my breath caught.

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- A. The letter is definitely a shopping list.
- B. The character cannot read.
- C. The letter is emotionally important or worrying.
- D. The character enjoys origami only.

Q7. English. Which opening is strongest for a controlled mystery?

- A. There was a book.
- B. At first the library seemed ordinary, until one book whispered my name.
- C. I went to a place and something happened.
- D. It was a day.

Q8. English. Which sentence most effectively builds suspense through contrast?

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- D. The character enjoys origami only.

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- B. At first the library seemed ordinary, until one book whispered my name.
- C. I went to a place and something happened.
- D. It was a day.

Q12. English. Which sentence most effectively builds suspense through contrast?

- A. The playground was bright and noisy, but the shed behind it stood silent.
- B. The playground was bright and noisy and fun.
- C. The shed was old and brown.
- D. I went to the playground.

English Adventure Set 4 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. English. Which phrase best shows fear without naming it?

- A. I was very scared.
- B. It was scary.
- C. I did not like it.
- D. My fingers tightened around the handle as my breath caught.

Q2. English. A writer describes a character as 'carefully folding the same letter again and again'. What can be inferred?

- A. The letter is definitely a shopping list.
- B. The character cannot read.
- C. The letter is emotionally important or worrying.
- D. The character enjoys origami only.

Q3. English. Which opening is strongest for a controlled mystery?

- A. There was a book.
- B. At first the library seemed ordinary, until one book whispered my name.
- C. I went to a place and something happened.
- D. It was a day.

Q4. English. Which sentence most effectively builds suspense through contrast?

- A. The playground was bright and noisy, but the shed behind it stood silent.
- B. The playground was bright and noisy and fun.
- C. The shed was old and brown.
- D. I went to the playground.

Q5. English. Which phrase best shows fear without naming it?

- A. I was very scared.
- B. It was scary.
- C. I did not like it.
- D. My fingers tightened around the handle as my breath caught.

Q6. English. A writer describes a character as 'carefully folding the same letter again and again'. What can be inferred?

- A. The letter is definitely a shopping list.
- B. The character cannot read.
- C. The letter is emotionally important or worrying.
- D. The character enjoys origami only.

Q7. English. Which opening is strongest for a controlled mystery?

- A. There was a book.
- B. At first the library seemed ordinary, until one book whispered my name.
- C. I went to a place and something happened.
- D. It was a day.

Q8. English. Which sentence most effectively builds suspense through contrast?

- A. The playground was bright and noisy, but the shed behind it stood silent.
- B. The playground was bright and noisy and fun.
- C. The shed was old and brown.
- D. I went to the playground.

Q9. English. Which phrase best shows fear without naming it?

- A. I was very scared.
- B. It was scary.
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- D. It was a day.

Q12. English. Which sentence most effectively builds suspense through contrast?

- A. The playground was bright and noisy, but the shed behind it stood silent.
- B. The playground was bright and noisy and fun.
- C. The shed was old and brown.
- D. I went to the playground.

English Beacon Set 1 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. English. Explain why contrast can create suspense in a story opening.

Answer: _____

Answer: _____

Q2. English. Write one inference from: 'Amira folded the note twice before hiding it.'

Answer: _____

Answer: _____

Q3. English. Improve this sentence: 'The room was dark and scary.'

Answer: _____

Answer: _____

Q4. English. Rewrite 'I was scared' using body action and atmosphere.

Answer: _____

Answer: _____

Q5. English. Explain why contrast can create suspense in a story opening.

Answer: _____

Answer: _____

Q6. English. Write one inference from: 'Amira folded the note twice before hiding it.'

Answer: _____

Answer: _____

Q7. English. Improve this sentence: 'The room was dark and scary.'

Answer: _____

Answer: _____

Q8. English. Rewrite 'I was scared' using body action and atmosphere.

Answer: _____

Answer: _____

Q9. English. Explain why contrast can create suspense in a story opening.

Answer: _____

Answer: _____

Q10. English. Write one inference from: 'Amira folded the note twice before hiding it.'

Answer: _____

Answer: _____

English Beacon Set 2 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. English. Improve this sentence: 'The room was dark and scary.'

Answer: _____

Answer: _____

Q2. English. Rewrite 'I was scared' using body action and atmosphere.

Answer: _____

Answer: _____

Q3. English. Explain why contrast can create suspense in a story opening.

Answer: _____

Answer: _____

Q4. English. Write one inference from: 'Amira folded the note twice before hiding it.'

Answer: _____

Answer: _____

Q5. English. Improve this sentence: 'The room was dark and scary.'

Answer: _____

Answer: _____

Q6. English. Rewrite 'I was scared' using body action and atmosphere.

Answer: _____

Answer: _____

Q7. English. Explain why contrast can create suspense in a story opening.

Answer: _____

Answer: _____

Q8. English. Write one inference from: 'Amira folded the note twice before hiding it.'

Answer: _____

Answer: _____

Q9. English. Improve this sentence: 'The room was dark and scary.'

Answer: _____

Answer: _____

Q10. English. Rewrite 'I was scared' using body action and atmosphere.

Answer: _____

Answer: _____

English Beacon Set 3 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. English. Explain why contrast can create suspense in a story opening.

Answer: _____

Answer: _____

Q2. English. Write one inference from: 'Amira folded the note twice before hiding it.'

Answer: _____

Answer: _____

Q3. English. Improve this sentence: 'The room was dark and scary.'

Answer: _____

Answer: _____

Q4. English. Rewrite 'I was scared' using body action and atmosphere.

Answer: _____

Answer: _____

Q5. English. Explain why contrast can create suspense in a story opening.

Answer: _____

Answer: _____

Q6. English. Write one inference from: 'Amira folded the note twice before hiding it.'

Answer: _____

Answer: _____

Q7. English. Improve this sentence: 'The room was dark and scary.'

Answer: _____

Answer: _____

Q8. English. Rewrite 'I was scared' using body action and atmosphere.

Answer: _____

Answer: _____

Q9. English. Explain why contrast can create suspense in a story opening.

Answer: _____

Answer: _____

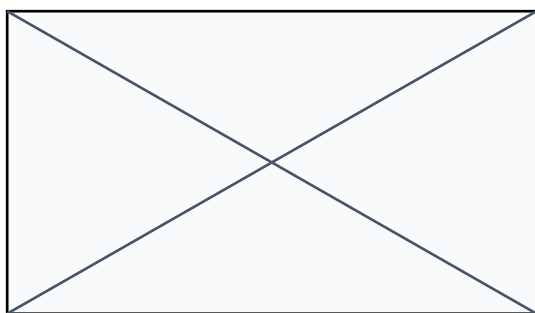
Q10. English. Write one inference from: 'Amira folded the note twice before hiding it.'

Answer: _____

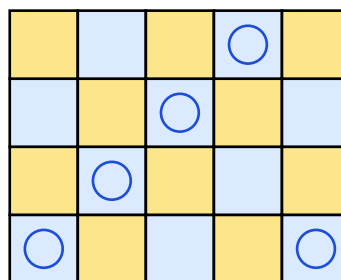
Answer: _____

English Diagram / Visual Challenge 1

Art stimulus: composition, pattern, contrast and perspective



one-point perspective



repeated motif pattern

Use the visual stimulus above. These questions require interpreting the diagram rather than simply remembering facts.

Q1. English. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q2. English. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q3. English. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q4. English. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q5. English. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q6. English. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

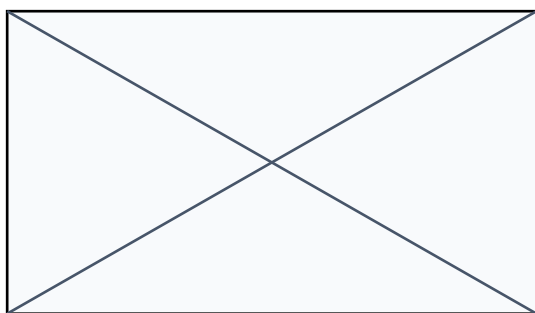
Answer: _____

Answer: _____

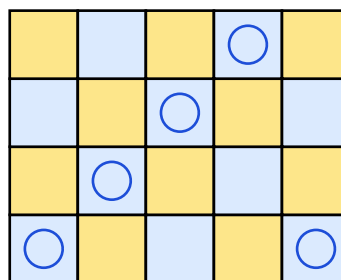
Answer: _____

English Diagram / Visual Challenge 2

Art stimulus: composition, pattern, contrast and perspective



one-point perspective



repeated motif pattern

Use the visual stimulus above. These questions require interpreting the diagram rather than simply remembering facts.

Q1. English. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q2. English. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q3. English. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q4. English. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q5. English. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q6. English. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

English Level 4 Stretch Challenge 1

These are the hardest questions in the chapter. They may combine subject knowledge, interpretation and explanation.

Q1. English. Which opening is strongest for a controlled mystery?

- A. There was a book.
- B. At first the library seemed ordinary, until one book whispered my name.
- C. I went to a place and something happened.
- D. It was a day.

Q2. English. Write one inference from: 'Amira folded the note twice before hiding it.'

Answer: _____

Answer: _____

Q3. English. Which phrase best shows fear without naming it?

- A. I was very scared.
- B. It was scary.
- C. I did not like it.
- D. My fingers tightened around the handle as my breath caught.

Q4. English. Rewrite 'I was scared' using body action and atmosphere.

Answer: _____

Answer: _____

Q5. English. Which opening is strongest for a controlled mystery?

- A. There was a book.
- B. At first the library seemed ordinary, until one book whispered my name.
- C. I went to a place and something happened.
- D. It was a day.

Q6. English. Write one inference from: 'Amira folded the note twice before hiding it.'

Answer: _____

Answer: _____

Q7. English. Which phrase best shows fear without naming it?

- A. I was very scared.
- B. It was scary.
- C. I did not like it.
- D. My fingers tightened around the handle as my breath caught.

Q8. English. Rewrite 'I was scared' using body action and atmosphere.

Answer: _____

Answer: _____

English Level 4 Stretch Challenge 2

These are the hardest questions in the chapter. They may combine subject knowledge, interpretation and explanation.

Q1. English. Which phrase best shows fear without naming it?

- A. I was very scared.
- B. It was scary.
- C. I did not like it.
- D. My fingers tightened around the handle as my breath caught.

Q2. English. Write one inference from: 'Amira folded the note twice before hiding it.'

Answer: _____

Answer: _____

Q3. English. Which opening is strongest for a controlled mystery?

- A. There was a book.
- B. At first the library seemed ordinary, until one book whispered my name.
- C. I went to a place and something happened.
- D. It was a day.

Q4. English. Rewrite 'I was scared' using body action and atmosphere.

Answer: _____

Answer: _____

Q5. English. Which phrase best shows fear without naming it?

- A. I was very scared.
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- D. My fingers tightened around the handle as my breath caught.

Q6. English. Write one inference from: 'Amira folded the note twice before hiding it.'

Answer: _____

Answer: _____

Q7. English. Which opening is strongest for a controlled mystery?

- A. There was a book.
- B. At first the library seemed ordinary, until one book whispered my name.
- C. I went to a place and something happened.
- D. It was a day.

Q8. English. Rewrite 'I was scared' using body action and atmosphere.

Answer: _____

Answer: _____

English Answers and Explanations

Set	Q	Answer	Explanation
A1	1	D	Body reaction shows emotion indirectly.
A1	2	C	Repetition of careful action suggests concern or importance.
A1	3	B	Normal setting plus impossible detail creates mystery.
A1	4	A	The contrast between noise and silence creates tension.
A1	5	D	Body reaction shows emotion indirectly.
A1	6	C	Repetition of careful action suggests concern or importance.
A1	7	B	Normal setting plus impossible detail creates mystery.
A1	8	A	The contrast between noise and silence creates tension.
A1	9	D	Body reaction shows emotion indirectly.
A1	10	C	Repetition of careful action suggests concern or importance.
A1	11	B	Normal setting plus impossible detail creates mystery.
A1	12	A	The contrast between noise and silence creates tension.
A2	1	D	Body reaction shows emotion indirectly.
A2	2	C	Repetition of careful action suggests concern or importance.
A2	3	B	Normal setting plus impossible detail creates mystery.
A2	4	A	The contrast between noise and silence creates tension.
Set	Q	Answer	Explanation
A2	5	D	Body reaction shows emotion indirectly.
A2	6	C	Repetition of careful action suggests concern or importance.
A2	7	B	Normal setting plus impossible detail creates mystery.
A2	8	A	The contrast between noise and silence creates tension.
A2	9	D	Body reaction shows emotion indirectly.
A2	10	C	Repetition of careful action suggests concern or importance.
A2	11	B	Normal setting plus impossible detail creates mystery.
A2	12	A	The contrast between noise and silence creates tension.
A3	1	D	Body reaction shows emotion indirectly.
A3	2	C	Repetition of careful action suggests concern or importance.
A3	3	B	Normal setting plus impossible detail creates mystery.
A3	4	A	The contrast between noise and silence creates tension.
A3	5	D	Body reaction shows emotion indirectly.
A3	6	C	Repetition of careful action suggests concern or importance.
A3	7	B	Normal setting plus impossible detail creates mystery.
A3	8	A	The contrast between noise and silence creates tension.
Set	Q	Answer	Explanation
A3	9	D	Body reaction shows emotion indirectly.
A3	10	C	Repetition of careful action suggests concern or importance.
A3	11	B	Normal setting plus impossible detail creates mystery.
A3	12	A	The contrast between noise and silence creates tension.
A4	1	D	Body reaction shows emotion indirectly.
A4	2	C	Repetition of careful action suggests concern or importance.
A4	3	B	Normal setting plus impossible detail creates mystery.
A4	4	A	The contrast between noise and silence creates tension.
A4	5	D	Body reaction shows emotion indirectly.
A4	6	C	Repetition of careful action suggests concern or importance.
A4	7	B	Normal setting plus impossible detail creates mystery.
A4	8	A	The contrast between noise and silence creates tension.
A4	9	D	Body reaction shows emotion indirectly.
A4	10	C	Repetition of careful action suggests concern or importance.
A4	11	B	Normal setting plus impossible detail creates mystery.

Set	Q	Answer	Explanation
A4	12	A	The contrast between noise and silence creates tension.

Beacon answers should be marked for accuracy, vocabulary, reasoning and clarity. Accept any answer that is logically correct and uses the subject concept precisely.

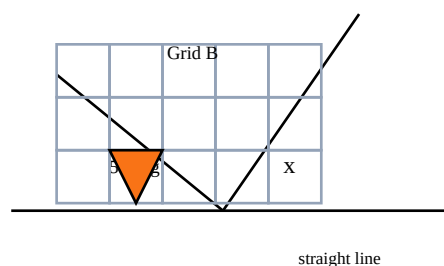
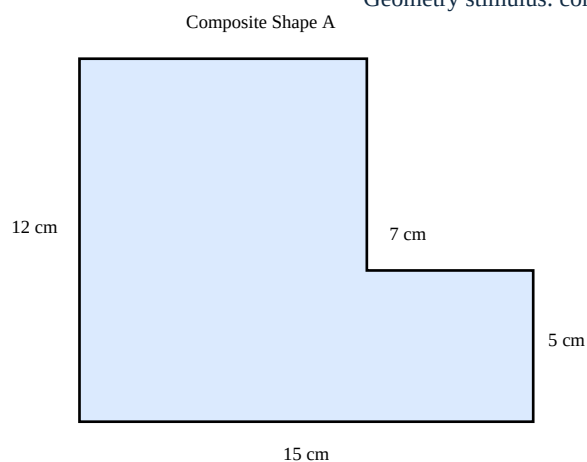
Chapter 2: Mathematics - Hard KS3-Bridge Practice

This chapter trains advanced 11+ thinking in Mathematics. The focus is not simple memory; the questions require interpretation, evidence, diagrams, comparison and precise explanation.

Subject skill map

- Understand and use specialist Mathematics vocabulary precisely.
- Interpret diagrams, charts, tables or visual evidence.
- Eliminate tempting but weaker answer choices.
- Write short answers using exact terminology.
- Explain reasoning clearly under timed conditions.

Geometry stimulus: composite area, transformations and angles



Mathematics Vocabulary Bank - 35 Hard Words

For each word, learn the meaning and how it might be tested in a hard question.

Word	Meaning	How it is tested / used
integer	Key integer concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
prime	Key prime concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
factor	Key factor concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
multiple	Key multiple concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
ratio	Key ratio concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
proportion	Key proportion concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
percentage	Key percentage concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
equation	Key equation concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
variable	Key variable concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
coefficient	Key coefficient concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
perimeter	Key perimeter concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
area	Key area concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
volume	Key volume concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
surface area	Key surface area concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
scale factor	multiplier for enlargement or reduction	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
reflection	Key reflection concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
rotation	Key rotation concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
translation	Key translation concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
symmetry	Key symmetry concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
coordinate	Key coordinate concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
mean	Key mean concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
median	Key median concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
mode	Key mode concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
range	Key range concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
probability	Key probability concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
polygon	Key polygon concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
parallel	Key parallel concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
perpendicular	Key perpendicular concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
composite shape	Key composite shape concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
net	Key net concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
angle	Key angle concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
bearing	Key bearing concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
gradient	Key gradient concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
sequence	Key sequence concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.
nth term	Key nth term concept used in harder applied questions	Use this term when explaining mathematics reasoning, interpreting a diagram, or writing a precise Beacon answer.

Mathematics Vocabulary Application Drill 1

Use the target word accurately in context. Do not write a vague sentence. Your sentence must show the meaning.

1. Target word: integer. Write a precise sentence connected to Mathematics.

Sentence: _____

2. Target word: prime. Write a precise sentence connected to Mathematics.

Sentence: _____

3. Target word: factor. Write a precise sentence connected to Mathematics.

Sentence: _____

4. Target word: multiple. Write a precise sentence connected to Mathematics.

Sentence: _____

5. Target word: ratio. Write a precise sentence connected to Mathematics.

Sentence: _____

6. Target word: proportion. Write a precise sentence connected to Mathematics.

Sentence: _____

7. Target word: percentage. Write a precise sentence connected to Mathematics.

Sentence: _____

8. Target word: equation. Write a precise sentence connected to Mathematics.

Sentence: _____

9. Target word: variable. Write a precise sentence connected to Mathematics.

Sentence: _____

10. Target word: coefficient. Write a precise sentence connected to Mathematics.

Sentence: _____

11. Target word: perimeter. Write a precise sentence connected to Mathematics.

Sentence: _____

12. Target word: area. Write a precise sentence connected to Mathematics.

Sentence: _____

Mathematics Vocabulary Application Drill 2

Use the target word accurately in context. Do not write a vague sentence. Your sentence must show the meaning.

1. Target word: volume. Write a precise sentence connected to Mathematics.

Sentence: _____

2. Target word: surface area. Write a precise sentence connected to Mathematics.

Sentence: _____

3. Target word: scale factor. Write a precise sentence connected to Mathematics.

Sentence: _____

4. Target word: reflection. Write a precise sentence connected to Mathematics.

Sentence: _____

5. Target word: rotation. Write a precise sentence connected to Mathematics.

Sentence: _____

6. Target word: translation. Write a precise sentence connected to Mathematics.

Sentence: _____

7. Target word: symmetry. Write a precise sentence connected to Mathematics.

Sentence: _____

8. Target word: coordinate. Write a precise sentence connected to Mathematics.

Sentence: _____

9. Target word: mean. Write a precise sentence connected to Mathematics.

Sentence: _____

10. Target word: median. Write a precise sentence connected to Mathematics.

Sentence: _____

11. Target word: mode. Write a precise sentence connected to Mathematics.

Sentence: _____

12. Target word: range. Write a precise sentence connected to Mathematics.

Sentence: _____

Mathematics Worked Examples - Hard Reasoning

Worked Example 1. A triangle has angles in the ratio 3:4:5. What is the smallest angle?

- A. 60 degrees
- B. 75 degrees
- C. 36 degrees
- D. 45 degrees

Answer: D. $3+4+5=12$ parts; $180/12=15$; smallest= $3 \times 15=45$.

Worked Example 2. The mean of six numbers is 18. Five numbers total 82. What is the missing number?

- A. 24
- B. 28
- C. 26
- D. 18

Answer: C. Total must be 108; $108-82=26$.

Worked Example 3. A prism has cross-section area 18 cm squared and length 7 cm. What is the volume?

- A. 98 cm cubed
- B. 126 cm cubed
- C. 25 cm cubed
- D. 63 cm cubed

Answer: B. Volume = cross-section area $\times$ length.

Worked Example 4. A rectangle is enlarged by scale factor 4. Its original area is 12 cm squared. What is the enlarged area?

- A. 192 cm squared
- B. 48 cm squared
- C. 96 cm squared
- D. 64 cm squared

Answer: A. Area increases by scale factor squared: $4 \text{ squared} = 16$; $12 \times 16 = 192$.

Mathematics Adventure Set 1 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Mathematics. A triangle has angles in the ratio 3:4:5. What is the smallest angle?

- A. 60 degrees
- B. 75 degrees
- C. 36 degrees
- D. 45 degrees

Q2. Mathematics. The mean of six numbers is 18. Five numbers total 82. What is the missing number?

- A. 24
- B. 28
- C. 26
- D. 18

Q3. Mathematics. A prism has cross-section area 18 cm squared and length 7 cm. What is the volume?

- A. 98 cm cubed
- B. 126 cm cubed
- C. 25 cm cubed
- D. 63 cm cubed

Q4. Mathematics. A rectangle is enlarged by scale factor 4. Its original area is 12 cm squared. What is the enlarged area?

- A. 192 cm squared
- B. 48 cm squared
- C. 96 cm squared
- D. 64 cm squared

Q5. Mathematics. A triangle has angles in the ratio 3:4:5. What is the smallest angle?

- A. 60 degrees
- B. 75 degrees
- C. 36 degrees
- D. 45 degrees

Q6. Mathematics. The mean of six numbers is 18. Five numbers total 82. What is the missing number?

- A. 24
- B. 28
- C. 26
- D. 18

Q7. Mathematics. A prism has cross-section area 18 cm squared and length 7 cm. What is the volume?

- A. 98 cm cubed
- B. 126 cm cubed
- C. 25 cm cubed
- D. 63 cm cubed

Q8. Mathematics. A rectangle is enlarged by scale factor 4. Its original area is 12 cm squared. What is the enlarged area?

- A. 192 cm squared
- B. 48 cm squared
- C. 96 cm squared
- D. 64 cm squared

Q9. Mathematics. A triangle has angles in the ratio 3:4:5. What is the smallest angle?

- A. 60 degrees
- B. 75 degrees
- C. 36 degrees
- D. 45 degrees

Q10. Mathematics. The mean of six numbers is 18. Five numbers total 82. What is the missing number?

- A. 24
- B. 28
- C. 26
- D. 18

Q11. Mathematics. A prism has cross-section area 18 cm squared and length 7 cm. What is the volume?

- A. 98 cm cubed
- B. 126 cm cubed
- C. 25 cm cubed
- D. 63 cm cubed

Q12. Mathematics. A rectangle is enlarged by scale factor 4. Its original area is 12 cm squared. What is the enlarged area?

- A. 192 cm squared
- B. 48 cm squared
- C. 96 cm squared
- D. 64 cm squared

Mathematics Adventure Set 2 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Mathematics. A triangle has angles in the ratio 3:4:5. What is the smallest angle?

- A. 60 degrees
- B. 75 degrees
- C. 36 degrees
- D. 45 degrees

Q2. Mathematics. The mean of six numbers is 18. Five numbers total 82. What is the missing number?

- A. 24
- B. 28
- C. 26
- D. 18

Q3. Mathematics. A prism has cross-section area 18 cm squared and length 7 cm. What is the volume?

- A. 98 cm cubed
- B. 126 cm cubed
- C. 25 cm cubed
- D. 63 cm cubed

Q4. Mathematics. A rectangle is enlarged by scale factor 4. Its original area is 12 cm squared. What is the enlarged area?

- A. 192 cm squared
- B. 48 cm squared
- C. 96 cm squared
- D. 64 cm squared

Q5. Mathematics. A triangle has angles in the ratio 3:4:5. What is the smallest angle?

- A. 60 degrees
- B. 75 degrees
- C. 36 degrees
- D. 45 degrees

Q6. Mathematics. The mean of six numbers is 18. Five numbers total 82. What is the missing number?

- A. 24
- B. 28
- C. 26
- D. 18

Q7. Mathematics. A prism has cross-section area 18 cm squared and length 7 cm. What is the volume?

- A. 98 cm cubed
- B. 126 cm cubed
- C. 25 cm cubed
- D. 63 cm cubed

Q8. Mathematics. A rectangle is enlarged by scale factor 4. Its original area is 12 cm squared. What is the enlarged area?

- A. 192 cm squared
- B. 48 cm squared
- C. 96 cm squared
- D. 64 cm squared

Q9. Mathematics. A triangle has angles in the ratio 3:4:5. What is the smallest angle?

- A. 60 degrees
- B. 75 degrees
- C. 36 degrees
- D. 45 degrees

Q10. Mathematics. The mean of six numbers is 18. Five numbers total 82. What is the missing number?

- A. 24
- B. 28
- C. 26
- D. 18

Q11. Mathematics. A prism has cross-section area 18 cm squared and length 7 cm. What is the volume?

- A. 98 cm cubed
- B. 126 cm cubed
- C. 25 cm cubed
- D. 63 cm cubed

Q12. Mathematics. A rectangle is enlarged by scale factor 4. Its original area is 12 cm squared. What is the enlarged area?

- A. 192 cm squared
- B. 48 cm squared
- C. 96 cm squared
- D. 64 cm squared

Mathematics Adventure Set 3 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Mathematics. A triangle has angles in the ratio 3:4:5. What is the smallest angle?

- A. 60 degrees
- B. 75 degrees
- C. 36 degrees
- D. 45 degrees

Q2. Mathematics. The mean of six numbers is 18. Five numbers total 82. What is the missing number?

- A. 24
- B. 28
- C. 26
- D. 18

Q3. Mathematics. A prism has cross-section area 18 cm squared and length 7 cm. What is the volume?

- A. 98 cm cubed
- B. 126 cm cubed
- C. 25 cm cubed
- D. 63 cm cubed

Q4. Mathematics. A rectangle is enlarged by scale factor 4. Its original area is 12 cm squared. What is the enlarged area?

- A. 192 cm squared
- B. 48 cm squared
- C. 96 cm squared
- D. 64 cm squared

Q5. Mathematics. A triangle has angles in the ratio 3:4:5. What is the smallest angle?

- A. 60 degrees
- B. 75 degrees
- C. 36 degrees
- D. 45 degrees

Q6. Mathematics. The mean of six numbers is 18. Five numbers total 82. What is the missing number?

- A. 24
- B. 28
- C. 26
- D. 18

Q7. Mathematics. A prism has cross-section area 18 cm squared and length 7 cm. What is the volume?

- A. 98 cm cubed
- B. 126 cm cubed
- C. 25 cm cubed
- D. 63 cm cubed

Q8. Mathematics. A rectangle is enlarged by scale factor 4. Its original area is 12 cm squared. What is the enlarged area?

- A. 192 cm squared
- B. 48 cm squared
- C. 96 cm squared
- D. 64 cm squared

Q9. Mathematics. A triangle has angles in the ratio 3:4:5. What is the smallest angle?

- A. 60 degrees
- B. 75 degrees
- C. 36 degrees
- D. 45 degrees

Q10. Mathematics. The mean of six numbers is 18. Five numbers total 82. What is the missing number?

- A. 24
- B. 28
- C. 26
- D. 18

Q11. Mathematics. A prism has cross-section area 18 cm squared and length 7 cm. What is the volume?

- A. 98 cm cubed
- B. 126 cm cubed
- C. 25 cm cubed
- D. 63 cm cubed

Q12. Mathematics. A rectangle is enlarged by scale factor 4. Its original area is 12 cm squared. What is the enlarged area?

- A. 192 cm squared
- B. 48 cm squared
- C. 96 cm squared
- D. 64 cm squared

Mathematics Adventure Set 4 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Mathematics. A triangle has angles in the ratio 3:4:5. What is the smallest angle?

- A. 60 degrees
- B. 75 degrees
- C. 36 degrees
- D. 45 degrees

Q2. Mathematics. The mean of six numbers is 18. Five numbers total 82. What is the missing number?

- A. 24
- B. 28
- C. 26
- D. 18

Q3. Mathematics. A prism has cross-section area 18 cm squared and length 7 cm. What is the volume?

- A. 98 cm cubed
- B. 126 cm cubed
- C. 25 cm cubed
- D. 63 cm cubed

Q4. Mathematics. A rectangle is enlarged by scale factor 4. Its original area is 12 cm squared. What is the enlarged area?

- A. 192 cm squared
- B. 48 cm squared
- C. 96 cm squared
- D. 64 cm squared

Q5. Mathematics. A triangle has angles in the ratio 3:4:5. What is the smallest angle?

- A. 60 degrees
- B. 75 degrees
- C. 36 degrees
- D. 45 degrees

Q6. Mathematics. The mean of six numbers is 18. Five numbers total 82. What is the missing number?

- A. 24
- B. 28
- C. 26
- D. 18

Q7. Mathematics. A prism has cross-section area 18 cm squared and length 7 cm. What is the volume?

- A. 98 cm cubed
- B. 126 cm cubed
- C. 25 cm cubed
- D. 63 cm cubed

Q8. Mathematics. A rectangle is enlarged by scale factor 4. Its original area is 12 cm squared. What is the enlarged area?

- A. 192 cm squared
- B. 48 cm squared
- C. 96 cm squared
- D. 64 cm squared

Q9. Mathematics. A triangle has angles in the ratio 3:4:5. What is the smallest angle?

- A. 60 degrees
- B. 75 degrees
- C. 36 degrees
- D. 45 degrees

Q10. Mathematics. The mean of six numbers is 18. Five numbers total 82. What is the missing number?

- A. 24
- B. 28
- C. 26
- D. 18

Q11. Mathematics. A prism has cross-section area 18 cm squared and length 7 cm. What is the volume?

- A. 98 cm cubed
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- D. 63 cm cubed

Q12. Mathematics. A rectangle is enlarged by scale factor 4. Its original area is 12 cm squared. What is the enlarged area?

- A. 192 cm squared
- B. 48 cm squared
- C. 96 cm squared
- D. 64 cm squared

Mathematics Beacon Set 1 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Mathematics. A shape is enlarged by scale factor 3. Explain why the area scale factor is not 3.

Answer: _____

Answer: _____

Q2. Mathematics. Find a missing number when the mean of six numbers is 14 and five numbers total 71.

Answer: _____

Answer: _____

Q3. Mathematics. Describe how to split a composite shape into rectangles to find area.

Answer: _____

Answer: _____

Q4. Mathematics. Explain how to solve an angle problem on a straight line when there are three angles.

Answer: _____

Answer: _____

Q5. Mathematics. A shape is enlarged by scale factor 3. Explain why the area scale factor is not 3.

Answer: _____

Answer: _____

Q6. Mathematics. Find a missing number when the mean of six numbers is 14 and five numbers total 71.

Answer: _____

Answer: _____

Q7. Mathematics. Describe how to split a composite shape into rectangles to find area.

Answer: _____

Answer: _____

Q8. Mathematics. Explain how to solve an angle problem on a straight line when there are three angles.

Answer: _____

Answer: _____

Q9. Mathematics. A shape is enlarged by scale factor 3. Explain why the area scale factor is not 3.

Answer: _____

Answer: _____

Q10. Mathematics. Find a missing number when the mean of six numbers is 14 and five numbers total 71.

Answer: _____

Answer: _____

Mathematics Beacon Set 2 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Mathematics. Describe how to split a composite shape into rectangles to find area.

Answer: _____

Answer: _____

Q2. Mathematics. Explain how to solve an angle problem on a straight line when there are three angles.

Answer: _____

Answer: _____

Q3. Mathematics. A shape is enlarged by scale factor 3. Explain why the area scale factor is not 3.

Answer: _____

Answer: _____

Q4. Mathematics. Find a missing number when the mean of six numbers is 14 and five numbers total 71.

Answer: _____

Answer: _____

Q5. Mathematics. Describe how to split a composite shape into rectangles to find area.

Answer: _____

Answer: _____

Q6. Mathematics. Explain how to solve an angle problem on a straight line when there are three angles.

Answer: _____

Answer: _____

Q7. Mathematics. A shape is enlarged by scale factor 3. Explain why the area scale factor is not 3.

Answer: _____

Answer: _____

Q8. Mathematics. Find a missing number when the mean of six numbers is 14 and five numbers total 71.

Answer: _____

Answer: _____

Q9. Mathematics. Describe how to split a composite shape into rectangles to find area.

Answer: _____

Answer: _____

Q10. Mathematics. Explain how to solve an angle problem on a straight line when there are three angles.

Answer: _____

Answer: _____

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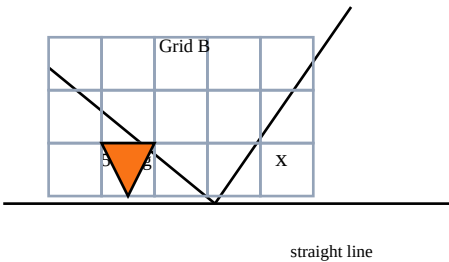
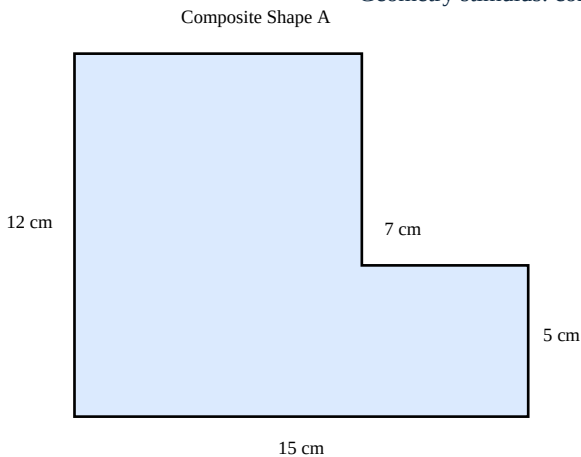
Q10. Mathematics. Find a missing number when the mean of six numbers is 14 and five numbers total 71.

Answer: _____

Answer: _____

Mathematics Diagram / Visual Challenge 1

Geometry stimulus: composite area, transformations and angles



Use the visual stimulus above. These questions require interpreting the diagram rather than simply remembering facts.

Q1. Mathematics. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q2. Mathematics. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

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Answer: _____

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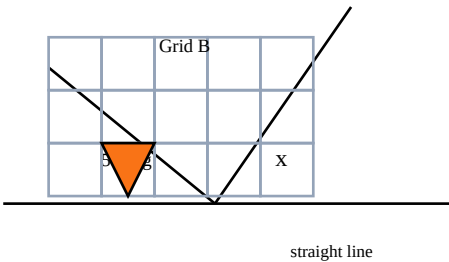
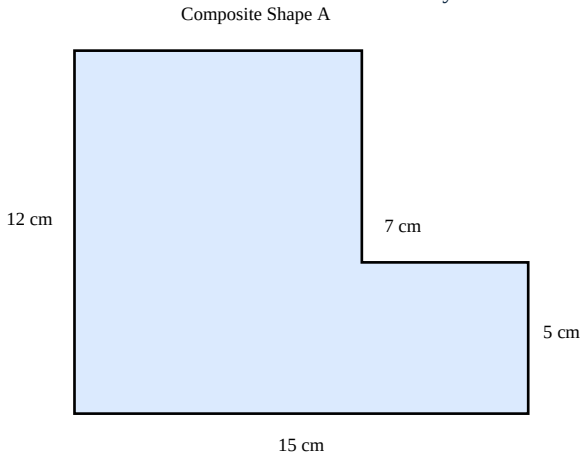
Answer: _____

Answer: _____

Answer: _____

Mathematics Diagram / Visual Challenge 2

Geometry stimulus: composite area, transformations and angles



Use the visual stimulus above. These questions require interpreting the diagram rather than simply remembering facts.

Q1. Mathematics. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

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Q2. Mathematics. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

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Mathematics Level 4 Stretch Challenge 1

These are the hardest questions in the chapter. They may combine subject knowledge, interpretation and explanation.

Q1. Mathematics. A prism has cross-section area 18 cm squared and length 7 cm. What is the volume?

- A. 98 cm cubed
- B. 126 cm cubed
- C. 25 cm cubed
- D. 63 cm cubed

Q2. Mathematics. Find a missing number when the mean of six numbers is 14 and five numbers total 71.

Answer: _____

Answer: _____

Q3. Mathematics. A triangle has angles in the ratio 3:4:5. What is the smallest angle?

- A. 60 degrees
- B. 75 degrees
- C. 36 degrees
- D. 45 degrees

Q4. Mathematics. Explain how to solve an angle problem on a straight line when there are three angles.

Answer: _____

Answer: _____

Q5. Mathematics. A prism has cross-section area 18 cm squared and length 7 cm. What is the volume?

- A. 98 cm cubed
- B. 126 cm cubed
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Answer: _____

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Mathematics Level 4 Stretch Challenge 2

These are the hardest questions in the chapter. They may combine subject knowledge, interpretation and explanation.

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Answer: _____

Answer: _____

Mathematics Answers and Explanations

Set	Q	Answer	Explanation
A1	1	D	$3+4+5=12$ parts; $180/12=15$; smallest= $3 \times 15=45$.
A1	2	C	Total must be 108; $108-82=26$.
A1	3	B	Volume = cross-section area x length.
A1	4	A	Area increases by scale factor squared: 4 squared = 16; $12 \times 16 = 192$.
A1	5	D	$3+4+5=12$ parts; $180/12=15$; smallest= $3 \times 15=45$.
A1	6	C	Total must be 108; $108-82=26$.
A1	7	B	Volume = cross-section area x length.
A1	8	A	Area increases by scale factor squared: 4 squared = 16; $12 \times 16 = 192$.
A1	9	D	$3+4+5=12$ parts; $180/12=15$; smallest= $3 \times 15=45$.
A1	10	C	Total must be 108; $108-82=26$.
A1	11	B	Volume = cross-section area x length.
A1	12	A	Area increases by scale factor squared: 4 squared = 16; $12 \times 16 = 192$.
A2	1	D	$3+4+5=12$ parts; $180/12=15$; smallest= $3 \times 15=45$.
A2	2	C	Total must be 108; $108-82=26$.
A2	3	B	Volume = cross-section area x length.
A2	4	A	Area increases by scale factor squared: 4 squared = 16; $12 \times 16 = 192$.
Set	Q	Answer	Explanation
A2	5	D	$3+4+5=12$ parts; $180/12=15$; smallest= $3 \times 15=45$.
A2	6	C	Total must be 108; $108-82=26$.
A2	7	B	Volume = cross-section area x length.
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A3	1	D	$3+4+5=12$ parts; $180/12=15$; smallest= $3 \times 15=45$.
A3	2	C	Total must be 108; $108-82=26$.
A3	3	B	Volume = cross-section area x length.
A3	4	A	Area increases by scale factor squared: 4 squared = 16; $12 \times 16 = 192$.
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A3	11	B	Volume = cross-section area x length.
A3	12	A	Area increases by scale factor squared: 4 squared = 16; $12 \times 16 = 192$.
A4	1	D	$3+4+5=12$ parts; $180/12=15$; smallest= $3 \times 15=45$.
A4	2	C	Total must be 108; $108-82=26$.
A4	3	B	Volume = cross-section area x length.
A4	4	A	Area increases by scale factor squared: 4 squared = 16; $12 \times 16 = 192$.
A4	5	D	$3+4+5=12$ parts; $180/12=15$; smallest= $3 \times 15=45$.
A4	6	C	Total must be 108; $108-82=26$.
A4	7	B	Volume = cross-section area x length.
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A4	10	C	Total must be 108; $108-82=26$.
A4	11	B	Volume = cross-section area x length.

Set	Q	Answer	Explanation
A4	12	A	Area increases by scale factor squared: 4 squared = 16; 12 x 16 = 192.

Beacon answers should be marked for accuracy, vocabulary, reasoning and clarity. Accept any answer that is logically correct and uses the subject concept precisely.

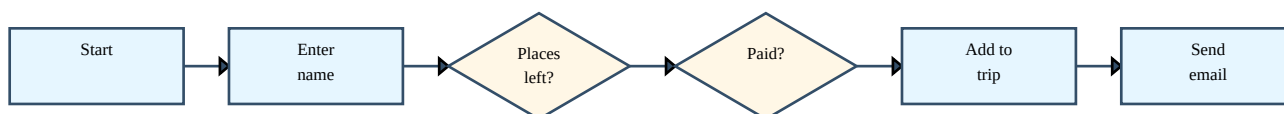
Chapter 3: Science - Hard KS3-Bridge Practice

This chapter trains advanced 11+ thinking in Science. The focus is not simple memory; the questions require interpretation, evidence, diagrams, comparison and precise explanation.

Subject skill map

- Understand and use specialist Science vocabulary precisely.
- Interpret diagrams, charts, tables or visual evidence.
- Eliminate tempting but weaker answer choices.
- Write short answers using exact terminology.
- Explain reasoning clearly under timed conditions.

Computing stimulus: school trip booking algorithm



NO -> waiting list

NO -> request payment

Possible bug: payment check happens after place check, but not after waiting list update.

Science Vocabulary Bank - 35 Hard Words

For each word, learn the meaning and how it might be tested in a hard question.

Word	Meaning	How it is tested / used
hypothesis	testable prediction	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
variable	Key variable concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
independent variable	Key independent variable concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
dependent variable	Key dependent variable concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
control variable	Key control variable concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
fair test	Key fair test concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
reliability	Key reliability concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
Word	Meaning	How it is tested / used
accuracy	Key accuracy concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
precision	Key precision concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
conclusion	Key conclusion concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
evidence	Key evidence concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
adaptation	Key adaptation concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
ecosystem	Key ecosystem concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
photosynthesis	Key photosynthesis concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
Word	Meaning	How it is tested / used
respiration	Key respiration concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
evaporation	Key evaporation concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
condensation	Key condensation concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
thermal conductor	Key thermal conductor concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
electrical insulator	Key electrical insulator concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
reversible change	Key reversible change concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
irreversible change	Key irreversible change concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
force	Key force concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
friction	Key friction concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
gravity	Key gravity concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
magnetism	Key magnetism concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
circuit	Key circuit concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
resistance	Key resistance concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
light source	Key light source concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
reflection	Key reflection concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
refraction	Key refraction concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
shadow	Key shadow concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
nutrition	Key nutrition concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
skeleton	Key skeleton concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
classification	Key classification concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.
data logger	Key data logger concept used in harder applied questions	Use this term when explaining science reasoning, interpreting a diagram, or writing a precise Beacon answer.

Science Vocabulary Application Drill 1

Use the target word accurately in context. Do not write a vague sentence. Your sentence must show the meaning.

1. Target word: hypothesis. Write a precise sentence connected to Science.

Sentence: _____

2. Target word: variable. Write a precise sentence connected to Science.

Sentence: _____

3. Target word: independent variable. Write a precise sentence connected to Science.

Sentence: _____

4. Target word: dependent variable. Write a precise sentence connected to Science.

Sentence: _____

5. Target word: control variable. Write a precise sentence connected to Science.

Sentence: _____

6. Target word: fair test. Write a precise sentence connected to Science.

Sentence: _____

7. Target word: reliability. Write a precise sentence connected to Science.

Sentence: _____

8. Target word: accuracy. Write a precise sentence connected to Science.

Sentence: _____

9. Target word: precision. Write a precise sentence connected to Science.

Sentence: _____

10. Target word: conclusion. Write a precise sentence connected to Science.

Sentence: _____

11. Target word: evidence. Write a precise sentence connected to Science.

Sentence: _____

12. Target word: adaptation. Write a precise sentence connected to Science.

Sentence: _____

Science Vocabulary Application Drill 2

Use the target word accurately in context. Do not write a vague sentence. Your sentence must show the meaning.

1. Target word: ecosystem. Write a precise sentence connected to Science.

Sentence: _____

2. Target word: photosynthesis. Write a precise sentence connected to Science.

Sentence: _____

3. Target word: respiration. Write a precise sentence connected to Science.

Sentence: _____

4. Target word: evaporation. Write a precise sentence connected to Science.

Sentence: _____

5. Target word: condensation. Write a precise sentence connected to Science.

Sentence: _____

6. Target word: thermal conductor. Write a precise sentence connected to Science.

Sentence: _____

7. Target word: electrical insulator. Write a precise sentence connected to Science.

Sentence: _____

8. Target word: reversible change. Write a precise sentence connected to Science.

Sentence: _____

9. Target word: irreversible change. Write a precise sentence connected to Science.

Sentence: _____

10. Target word: force. Write a precise sentence connected to Science.

Sentence: _____

11. Target word: friction. Write a precise sentence connected to Science.

Sentence: _____

12. Target word: gravity. Write a precise sentence connected to Science.

Sentence: _____

Science Worked Examples - Hard Reasoning

Worked Example 1. Which conclusion is best supported by repeat readings that are close together?

- A. The experiment has no variables.
- B. The hypothesis must be false.
- C. The equipment was decorative.
- D. The results are likely to be reliable.

Answer: D. Close repeat readings suggest reliability.

Worked Example 2. Which material property matters most for saucepan handles?

- A. Magnetism only
- B. Solubility
- C. Thermal insulation
- D. Transparency

Answer: C. Handles should not conduct heat easily.

Worked Example 3. A plant near a window grows towards light. Which process helps explain why light matters?

- A. Condensation
- B. Photosynthesis
- C. Evaporation
- D. Friction

Answer: B. Plants use light for photosynthesis.

Worked Example 4. A pupil tests how ramp height affects toy car distance. Which is the independent variable?

- A. Ramp height
- B. Distance travelled
- C. Toy car colour
- D. Results table

Answer: A. The independent variable is the one changed deliberately.

Science Adventure Set 1 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Science. Which conclusion is best supported by repeat readings that are close together?

- A. The experiment has no variables.
- B. The hypothesis must be false.
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Q2. Science. Which material property matters most for saucepan handles?

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- D. Transparency

Q3. Science. A plant near a window grows towards light. Which process helps explain why light matters?

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Q4. Science. A pupil tests how ramp height affects toy car distance. Which is the independent variable?

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Q5. Science. Which conclusion is best supported by repeat readings that are close together?

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Science Adventure Set 2 - Hard Multiple Choice

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- C. Toy car colour
- D. Results table

Science Adventure Set 3 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

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Q7. Science. A plant near a window grows towards light. Which process helps explain why light matters?

- A. Condensation
- B. Photosynthesis
- C. Evaporation
- D. Friction

Q8. Science. A pupil tests how ramp height affects toy car distance. Which is the independent variable?

- A. Ramp height
- B. Distance travelled
- C. Toy car colour
- D. Results table

Q9. Science. Which conclusion is best supported by repeat readings that are close together?

- A. The experiment has no variables.
- B. The hypothesis must be false.
- C. The equipment was decorative.
- D. The results are likely to be reliable.

Q10. Science. Which material property matters most for saucepan handles?

- A. Magnetism only
- B. Solubility
- C. Thermal insulation
- D. Transparency

Q11. Science. A plant near a window grows towards light. Which process helps explain why light matters?

- A. Condensation
- B. Photosynthesis
- C. Evaporation
- D. Friction

Q12. Science. A pupil tests how ramp height affects toy car distance. Which is the independent variable?

- A. Ramp height
- B. Distance travelled
- C. Toy car colour
- D. Results table

Science Adventure Set 4 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Science. Which conclusion is best supported by repeat readings that are close together?

- A. The experiment has no variables.
- B. The hypothesis must be false.
- C. The equipment was decorative.
- D. The results are likely to be reliable.

Q2. Science. Which material property matters most for saucepan handles?

- A. Magnetism only
- B. Solubility
- C. Thermal insulation
- D. Transparency

Q3. Science. A plant near a window grows towards light. Which process helps explain why light matters?

- A. Condensation
- B. Photosynthesis
- C. Evaporation
- D. Friction

Q4. Science. A pupil tests how ramp height affects toy car distance. Which is the independent variable?

- A. Ramp height
- B. Distance travelled
- C. Toy car colour
- D. Results table

Q5. Science. Which conclusion is best supported by repeat readings that are close together?

- A. The experiment has no variables.
- B. The hypothesis must be false.
- C. The equipment was decorative.
- D. The results are likely to be reliable.

Q6. Science. Which material property matters most for saucepan handles?

- A. Magnetism only
- B. Solubility
- C. Thermal insulation
- D. Transparency

Q7. Science. A plant near a window grows towards light. Which process helps explain why light matters?

- A. Condensation
- B. Photosynthesis
- C. Evaporation
- D. Friction

Q8. Science. A pupil tests how ramp height affects toy car distance. Which is the independent variable?

- A. Ramp height
- B. Distance travelled
- C. Toy car colour
- D. Results table

Q9. Science. Which conclusion is best supported by repeat readings that are close together?

- A. The experiment has no variables.
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- C. The equipment was decorative.
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Q10. Science. Which material property matters most for saucepan handles?

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- A. Condensation
- B. Photosynthesis
- C. Evaporation
- D. Friction

Q12. Science. A pupil tests how ramp height affects toy car distance. Which is the independent variable?

- A. Ramp height
- B. Distance travelled
- C. Toy car colour
- D. Results table

Science Beacon Set 1 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Science. Explain why repeat readings can improve reliability.

Answer: _____

Answer: _____

Q2. Science. Describe one fair test for comparing thermal conductors.

Answer: _____

Answer: _____

Q3. Science. Explain the difference between accuracy and precision.

Answer: _____

Answer: _____

Q4. Science. Identify independent, dependent and control variables in a ramp investigation.

Answer: _____

Answer: _____

Q5. Science. Explain why repeat readings can improve reliability.

Answer: _____

Answer: _____

Q6. Science. Describe one fair test for comparing thermal conductors.

Answer: _____

Answer: _____

Q7. Science. Explain the difference between accuracy and precision.

Answer: _____

Answer: _____

Q8. Science. Identify independent, dependent and control variables in a ramp investigation.

Answer: _____

Answer: _____

Q9. Science. Explain why repeat readings can improve reliability.

Answer: _____

Answer: _____

Q10. Science. Describe one fair test for comparing thermal conductors.

Answer: _____

Answer: _____

Science Beacon Set 2 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Science. Explain the difference between accuracy and precision.

Answer: _____

Answer: _____

Q2. Science. Identify independent, dependent and control variables in a ramp investigation.

Answer: _____

Answer: _____

Q3. Science. Explain why repeat readings can improve reliability.

Answer: _____

Answer: _____

Q4. Science. Describe one fair test for comparing thermal conductors.

Answer: _____

Answer: _____

Q5. Science. Explain the difference between accuracy and precision.

Answer: _____

Answer: _____

Q6. Science. Identify independent, dependent and control variables in a ramp investigation.

Answer: _____

Answer: _____

Q7. Science. Explain why repeat readings can improve reliability.

Answer: _____

Answer: _____

Q8. Science. Describe one fair test for comparing thermal conductors.

Answer: _____

Answer: _____

Q9. Science. Explain the difference between accuracy and precision.

Answer: _____

Answer: _____

Q10. Science. Identify independent, dependent and control variables in a ramp investigation.

Answer: _____

Answer: _____

Science Beacon Set 3 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Science. Explain why repeat readings can improve reliability.

Answer: _____

Answer: _____

Q2. Science. Describe one fair test for comparing thermal conductors.

Answer: _____

Answer: _____

Q3. Science. Explain the difference between accuracy and precision.

Answer: _____

Answer: _____

Q4. Science. Identify independent, dependent and control variables in a ramp investigation.

Answer: _____

Answer: _____

Q5. Science. Explain why repeat readings can improve reliability.

Answer: _____

Answer: _____

Q6. Science. Describe one fair test for comparing thermal conductors.

Answer: _____

Answer: _____

Q7. Science. Explain the difference between accuracy and precision.

Answer: _____

Answer: _____

Q8. Science. Identify independent, dependent and control variables in a ramp investigation.

Answer: _____

Answer: _____

Q9. Science. Explain why repeat readings can improve reliability.

Answer: _____

Answer: _____

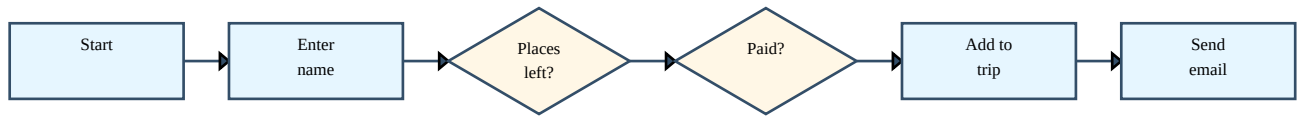
Q10. Science. Describe one fair test for comparing thermal conductors.

Answer: _____

Answer: _____

Science Diagram / Visual Challenge 1

Computing stimulus: school trip booking algorithm



NO -> waiting list

NO -> request payment

Possible bug: payment check happens after place check, but not after waiting list update.

Use the visual stimulus above. These questions require interpreting the diagram rather than simply remembering facts.

Q1. Science. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q2. Science. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q3. Science. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q4. Science. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q5. Science. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q6. Science. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

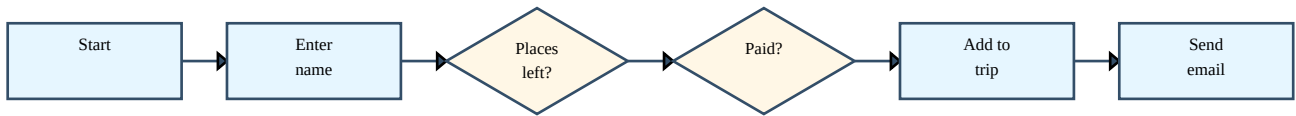
Answer: _____

Answer: _____

Answer: _____

Science Diagram / Visual Challenge 2

Computing stimulus: school trip booking algorithm



NO -> waiting list

NO -> request payment

Possible bug: payment check happens after place check, but not after waiting list update.

Use the visual stimulus above. These questions require interpreting the diagram rather than simply remembering facts.

Q1. Science. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q2. Science. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q3. Science. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q4. Science. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q5. Science. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q6. Science. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Science Level 4 Stretch Challenge 1

These are the hardest questions in the chapter. They may combine subject knowledge, interpretation and explanation.

Q1. Science. A plant near a window grows towards light. Which process helps explain why light matters?

- A. Condensation
- B. Photosynthesis
- C. Evaporation
- D. Friction

Q2. Science. Describe one fair test for comparing thermal conductors.

Answer: _____

Answer: _____

Q3. Science. Which conclusion is best supported by repeat readings that are close together?

- A. The experiment has no variables.
- B. The hypothesis must be false.
- C. The equipment was decorative.
- D. The results are likely to be reliable.

Q4. Science. Identify independent, dependent and control variables in a ramp investigation.

Answer: _____

Answer: _____

Q5. Science. A plant near a window grows towards light. Which process helps explain why light matters?

- A. Condensation
- B. Photosynthesis
- C. Evaporation
- D. Friction

Q6. Science. Describe one fair test for comparing thermal conductors.

Answer: _____

Answer: _____

Q7. Science. Which conclusion is best supported by repeat readings that are close together?

- A. The experiment has no variables.
- B. The hypothesis must be false.
- C. The equipment was decorative.
- D. The results are likely to be reliable.

Q8. Science. Identify independent, dependent and control variables in a ramp investigation.

Answer: _____

Answer: _____

Science Level 4 Stretch Challenge 2

These are the hardest questions in the chapter. They may combine subject knowledge, interpretation and explanation.

Q1. Science. Which conclusion is best supported by repeat readings that are close together?

- A. The experiment has no variables.
- B. The hypothesis must be false.
- C. The equipment was decorative.
- D. The results are likely to be reliable.

Q2. Science. Describe one fair test for comparing thermal conductors.

Answer: _____

Answer: _____

Q3. Science. A plant near a window grows towards light. Which process helps explain why light matters?

- A. Condensation
- B. Photosynthesis
- C. Evaporation
- D. Friction

Q4. Science. Identify independent, dependent and control variables in a ramp investigation.

Answer: _____

Answer: _____

Q5. Science. Which conclusion is best supported by repeat readings that are close together?

- A. The experiment has no variables.
- B. The hypothesis must be false.
- C. The equipment was decorative.
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Answer: _____

Answer: _____

Q7. Science. A plant near a window grows towards light. Which process helps explain why light matters?

- A. Condensation
- B. Photosynthesis
- C. Evaporation
- D. Friction

Q8. Science. Identify independent, dependent and control variables in a ramp investigation.

Answer: _____

Answer: _____

Science Answers and Explanations

Set	Q	Answer	Explanation
A1	1	D	Close repeat readings suggest reliability.
A1	2	C	Handles should not conduct heat easily.
A1	3	B	Plants use light for photosynthesis.
A1	4	A	The independent variable is the one changed deliberately.
A1	5	D	Close repeat readings suggest reliability.
A1	6	C	Handles should not conduct heat easily.
A1	7	B	Plants use light for photosynthesis.
A1	8	A	The independent variable is the one changed deliberately.
A1	9	D	Close repeat readings suggest reliability.
A1	10	C	Handles should not conduct heat easily.
A1	11	B	Plants use light for photosynthesis.
A1	12	A	The independent variable is the one changed deliberately.
A2	1	D	Close repeat readings suggest reliability.
A2	2	C	Handles should not conduct heat easily.
A2	3	B	Plants use light for photosynthesis.
A2	4	A	The independent variable is the one changed deliberately.

Set	Q	Answer	Explanation
A2	5	D	Close repeat readings suggest reliability.
A2	6	C	Handles should not conduct heat easily.
A2	7	B	Plants use light for photosynthesis.
A2	8	A	The independent variable is the one changed deliberately.
A2	9	D	Close repeat readings suggest reliability.
A2	10	C	Handles should not conduct heat easily.
A2	11	B	Plants use light for photosynthesis.
A2	12	A	The independent variable is the one changed deliberately.
A3	1	D	Close repeat readings suggest reliability.
A3	2	C	Handles should not conduct heat easily.
A3	3	B	Plants use light for photosynthesis.
A3	4	A	The independent variable is the one changed deliberately.
A3	5	D	Close repeat readings suggest reliability.
A3	6	C	Handles should not conduct heat easily.
A3	7	B	Plants use light for photosynthesis.
A3	8	A	The independent variable is the one changed deliberately.

Set	Q	Answer	Explanation
A3	9	D	Close repeat readings suggest reliability.
A3	10	C	Handles should not conduct heat easily.
A3	11	B	Plants use light for photosynthesis.
A3	12	A	The independent variable is the one changed deliberately.
A4	1	D	Close repeat readings suggest reliability.
A4	2	C	Handles should not conduct heat easily.
A4	3	B	Plants use light for photosynthesis.
A4	4	A	The independent variable is the one changed deliberately.
A4	5	D	Close repeat readings suggest reliability.
A4	6	C	Handles should not conduct heat easily.
A4	7	B	Plants use light for photosynthesis.
A4	8	A	The independent variable is the one changed deliberately.
A4	9	D	Close repeat readings suggest reliability.
A4	10	C	Handles should not conduct heat easily.
A4	11	B	Plants use light for photosynthesis.

Set	Q	Answer	Explanation
A4	12	A	The independent variable is the one changed deliberately.

Beacon answers should be marked for accuracy, vocabulary, reasoning and clarity. Accept any answer that is logically correct and uses the subject concept precisely.

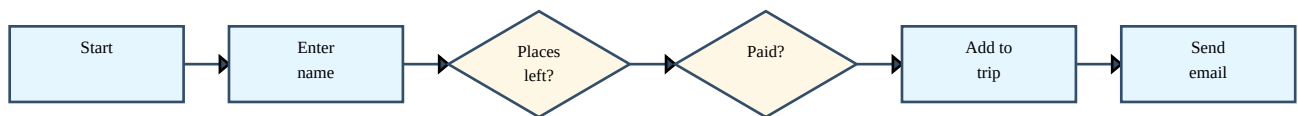
Chapter 4: Computing - Hard KS3-Bridge Practice

This chapter trains advanced 11+ thinking in Computing. The focus is not simple memory; the questions require interpretation, evidence, diagrams, comparison and precise explanation.

Subject skill map

- Understand and use specialist Computing vocabulary precisely.
- Interpret diagrams, charts, tables or visual evidence.
- Eliminate tempting but weaker answer choices.
- Write short answers using exact terminology.
- Explain reasoning clearly under timed conditions.

Computing stimulus: school trip booking algorithm



NO -> waiting list

NO -> request payment

Possible bug: payment check happens after place check, but not after waiting list update.

Computing Vocabulary Bank - 35 Hard Words

For each word, learn the meaning and how it might be tested in a hard question.

Word	Meaning	How it is tested / used
algorithm	Key algorithm concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
sequence	Key sequence concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
selection	programming choice based on a condition	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
iteration	Key iteration concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
condition	Key condition concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
variable	Key variable concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
debugging	Key debugging concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
Word	Meaning	How it is tested / used
flowchart	Key flowchart concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
pseudocode	Key pseudocode concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
input	Key input concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
output	Key output concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
process	Key process concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
database	Key database concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
record	Key record concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
Word	Meaning	How it is tested / used
field	Key field concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
query	Key query concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
sort	Key sort concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
filter	Key filter concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
network	Key network concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
protocol	Key protocol concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
encryption	Key encryption concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
password	Key password concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
privacy	Key privacy concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
cyberbullying	Key cyberbullying concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
binary	Key binary concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
simulation	Key simulation concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
interface	Key interface concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
sprite	Key sprite concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
event	Key event concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
loop	Key loop concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
logic gate	Key logic gate concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
AND	Key AND concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
OR	Key OR concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
NOT	Key NOT concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.
validation	Key validation concept used in harder applied questions	Use this term when explaining computing reasoning, interpreting a diagram, or writing a precise Beacon answer.

Computing Vocabulary Application Drill 1

Use the target word accurately in context. Do not write a vague sentence. Your sentence must show the meaning.

1. Target word: algorithm. Write a precise sentence connected to Computing.

Sentence: _____

2. Target word: sequence. Write a precise sentence connected to Computing.

Sentence: _____

3. Target word: selection. Write a precise sentence connected to Computing.

Sentence: _____

4. Target word: iteration. Write a precise sentence connected to Computing.

Sentence: _____

5. Target word: condition. Write a precise sentence connected to Computing.

Sentence: _____

6. Target word: variable. Write a precise sentence connected to Computing.

Sentence: _____

7. Target word: debugging. Write a precise sentence connected to Computing.

Sentence: _____

8. Target word: flowchart. Write a precise sentence connected to Computing.

Sentence: _____

9. Target word: pseudocode. Write a precise sentence connected to Computing.

Sentence: _____

10. Target word: input. Write a precise sentence connected to Computing.

Sentence: _____

11. Target word: output. Write a precise sentence connected to Computing.

Sentence: _____

12. Target word: process. Write a precise sentence connected to Computing.

Sentence: _____

Computing Vocabulary Application Drill 2

Use the target word accurately in context. Do not write a vague sentence. Your sentence must show the meaning.

1. Target word: database. Write a precise sentence connected to Computing.

Sentence: _____

2. Target word: record. Write a precise sentence connected to Computing.

Sentence: _____

3. Target word: field. Write a precise sentence connected to Computing.

Sentence: _____

4. Target word: query. Write a precise sentence connected to Computing.

Sentence: _____

5. Target word: sort. Write a precise sentence connected to Computing.

Sentence: _____

6. Target word: filter. Write a precise sentence connected to Computing.

Sentence: _____

7. Target word: network. Write a precise sentence connected to Computing.

Sentence: _____

8. Target word: protocol. Write a precise sentence connected to Computing.

Sentence: _____

9. Target word: encryption. Write a precise sentence connected to Computing.

Sentence: _____

10. Target word: password. Write a precise sentence connected to Computing.

Sentence: _____

11. Target word: privacy. Write a precise sentence connected to Computing.

Sentence: _____

12. Target word: cyberbullying. Write a precise sentence connected to Computing.

Sentence: _____

Computing Worked Examples - Hard Reasoning

Worked Example 1. A database query asks for Year 6 AND Music Club. Which record matches?

- A. Year 5 pupil in Music Club
- B. Year 6 pupil in Football Club
- C. Any Music Club pupil
- D. Year 6 pupil in Music Club

Answer: D. AND requires both conditions.

Worked Example 2. A robot repeats [move 3, turn right] four times. What is the likely route?

- A. A triangle
- B. No route
- C. A square-like route
- D. A straight line only

Answer: C. Four right turns can form a square path.

Worked Example 3. Which bug is most likely if valid pupils are rejected by a booking system?

- A. The database has names
- B. The true/false branch is reversed
- C. The font is too small
- D. The output is colourful

Answer: B. A reversed condition sends correct users the wrong way.

Worked Example 4. A program uses IF score $\geq$ 80 THEN certificate = 'Gold'. A pupil scores 80. What happens?

- A. Gold certificate is awarded
- B. No certificate is awarded
- C. The score becomes 79
- D. The program must loop forever

Answer: A. $\geq$ includes equality.

Computing Adventure Set 1 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Computing. A database query asks for Year 6 AND Music Club. Which record matches?

- A. Year 5 pupil in Music Club
- B. Year 6 pupil in Football Club
- C. Any Music Club pupil
- D. Year 6 pupil in Music Club

Q2. Computing. A robot repeats [move 3, turn right] four times. What is the likely route?

- A. A triangle
- B. No route
- C. A square-like route
- D. A straight line only

Q3. Computing. Which bug is most likely if valid pupils are rejected by a booking system?

- A. The database has names
- B. The true/false branch is reversed
- C. The font is too small
- D. The output is colourful

Q4. Computing. A program uses IF score $\geq$ 80 THEN certificate = 'Gold'. A pupil scores 80. What happens?

- A. Gold certificate is awarded
- B. No certificate is awarded
- C. The score becomes 79
- D. The program must loop forever

Q5. Computing. A database query asks for Year 6 AND Music Club. Which record matches?

- A. Year 5 pupil in Music Club
- B. Year 6 pupil in Football Club
- C. Any Music Club pupil
- D. Year 6 pupil in Music Club

Q6. Computing. A robot repeats [move 3, turn right] four times. What is the likely route?

- A. A triangle
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Q7. Computing. Which bug is most likely if valid pupils are rejected by a booking system?

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Q10. Computing. A robot repeats [move 3, turn right] four times. What is the likely route?

- A. A triangle
- B. No route
- C. A square-like route
- D. A straight line only

Q11. Computing. Which bug is most likely if valid pupils are rejected by a booking system?

- A. The database has names
- B. The true/false branch is reversed
- C. The font is too small
- D. The output is colourful

Q12. Computing. A program uses IF score $\geq$ 80 THEN certificate = 'Gold'. A pupil scores 80. What happens?

- A. Gold certificate is awarded
- B. No certificate is awarded
- C. The score becomes 79
- D. The program must loop forever

Computing Adventure Set 2 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Computing. A database query asks for Year 6 AND Music Club. Which record matches?

- A. Year 5 pupil in Music Club
- B. Year 6 pupil in Football Club
- C. Any Music Club pupil
- D. Year 6 pupil in Music Club

Q2. Computing. A robot repeats [move 3, turn right] four times. What is the likely route?

- A. A triangle
- B. No route
- C. A square-like route
- D. A straight line only

Q3. Computing. Which bug is most likely if valid pupils are rejected by a booking system?

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- C. A square-like route
- D. A straight line only

Q7. Computing. Which bug is most likely if valid pupils are rejected by a booking system?

- A. The database has names
- B. The true/false branch is reversed
- C. The font is too small
- D. The output is colourful

Q8. Computing. A program uses IF score $\geq$ 80 THEN certificate = 'Gold'. A pupil scores 80. What happens?

- A. Gold certificate is awarded
- B. No certificate is awarded
- C. The score becomes 79
- D. The program must loop forever

Q9. Computing. A database query asks for Year 6 AND Music Club. Which record matches?

- A. Year 5 pupil in Music Club
- B. Year 6 pupil in Football Club
- C. Any Music Club pupil
- D. Year 6 pupil in Music Club

Q10. Computing. A robot repeats [move 3, turn right] four times. What is the likely route?

- A. A triangle
- B. No route
- C. A square-like route
- D. A straight line only

Q11. Computing. Which bug is most likely if valid pupils are rejected by a booking system?

- A. The database has names
- B. The true/false branch is reversed
- C. The font is too small
- D. The output is colourful

Q12. Computing. A program uses IF score $\geq$ 80 THEN certificate = 'Gold'. A pupil scores 80. What happens?

- A. Gold certificate is awarded
- B. No certificate is awarded
- C. The score becomes 79
- D. The program must loop forever

Computing Adventure Set 3 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Computing. A database query asks for Year 6 AND Music Club. Which record matches?

- A. Year 5 pupil in Music Club
- B. Year 6 pupil in Football Club
- C. Any Music Club pupil
- D. Year 6 pupil in Music Club

Q2. Computing. A robot repeats [move 3, turn right] four times. What is the likely route?

- A. A triangle
- B. No route
- C. A square-like route
- D. A straight line only

Q3. Computing. Which bug is most likely if valid pupils are rejected by a booking system?

- A. The database has names
- B. The true/false branch is reversed
- C. The font is too small
- D. The output is colourful

Q4. Computing. A program uses IF score $\geq$ 80 THEN certificate = 'Gold'. A pupil scores 80. What happens?

- A. Gold certificate is awarded
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Q5. Computing. A database query asks for Year 6 AND Music Club. Which record matches?

- A. Year 5 pupil in Music Club
- B. Year 6 pupil in Football Club
- C. Any Music Club pupil
- D. Year 6 pupil in Music Club

Q6. Computing. A robot repeats [move 3, turn right] four times. What is the likely route?

- A. A triangle
- B. No route
- C. A square-like route
- D. A straight line only

Q7. Computing. Which bug is most likely if valid pupils are rejected by a booking system?

- A. The database has names
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- C. The font is too small
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Q8. Computing. A program uses IF score $\geq$ 80 THEN certificate = 'Gold'. A pupil scores 80. What happens?

- A. Gold certificate is awarded
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- C. The score becomes 79
- D. The program must loop forever

Q9. Computing. A database query asks for Year 6 AND Music Club. Which record matches?

- A. Year 5 pupil in Music Club
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Q10. Computing. A robot repeats [move 3, turn right] four times. What is the likely route?

- A. A triangle
- B. No route
- C. A square-like route
- D. A straight line only

Q11. Computing. Which bug is most likely if valid pupils are rejected by a booking system?

- A. The database has names
- B. The true/false branch is reversed
- C. The font is too small
- D. The output is colourful

Q12. Computing. A program uses IF score $\geq$ 80 THEN certificate = 'Gold'. A pupil scores 80. What happens?

- A. Gold certificate is awarded
- B. No certificate is awarded
- C. The score becomes 79
- D. The program must loop forever

Computing Adventure Set 4 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Computing. A database query asks for Year 6 AND Music Club. Which record matches?

- A. Year 5 pupil in Music Club
- B. Year 6 pupil in Football Club
- C. Any Music Club pupil
- D. Year 6 pupil in Music Club

Q2. Computing. A robot repeats [move 3, turn right] four times. What is the likely route?

- A. A triangle
- B. No route
- C. A square-like route
- D. A straight line only

Q3. Computing. Which bug is most likely if valid pupils are rejected by a booking system?

- A. The database has names
- B. The true/false branch is reversed
- C. The font is too small
- D. The output is colourful

Q4. Computing. A program uses IF score $\geq$ 80 THEN certificate = 'Gold'. A pupil scores 80. What happens?

- A. Gold certificate is awarded
- B. No certificate is awarded
- C. The score becomes 79
- D. The program must loop forever

Q5. Computing. A database query asks for Year 6 AND Music Club. Which record matches?

- A. Year 5 pupil in Music Club
- B. Year 6 pupil in Football Club
- C. Any Music Club pupil
- D. Year 6 pupil in Music Club

Q6. Computing. A robot repeats [move 3, turn right] four times. What is the likely route?

- A. A triangle
- B. No route
- C. A square-like route
- D. A straight line only

Q7. Computing. Which bug is most likely if valid pupils are rejected by a booking system?

- A. The database has names
- B. The true/false branch is reversed
- C. The font is too small
- D. The output is colourful

Q8. Computing. A program uses IF score $\geq$ 80 THEN certificate = 'Gold'. A pupil scores 80. What happens?

- A. Gold certificate is awarded
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- C. The score becomes 79
- D. The program must loop forever

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Q10. Computing. A robot repeats [move 3, turn right] four times. What is the likely route?

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- A. Gold certificate is awarded
- B. No certificate is awarded
- C. The score becomes 79
- D. The program must loop forever

Computing Beacon Set 1 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Computing. Explain why AND gives fewer database results than OR.

Answer: _____

Answer: _____

Q2. Computing. Describe one possible bug in a booking-system flowchart.

Answer: _____

Answer: _____

Q3. Computing. Explain input, process and output using a ticket machine.

Answer: _____

Answer: _____

Q4. Computing. Write pseudocode using IF/ELSE for a homework app.

Answer: _____

Answer: _____

Q5. Computing. Explain why AND gives fewer database results than OR.

Answer: _____

Answer: _____

Q6. Computing. Describe one possible bug in a booking-system flowchart.

Answer: _____

Answer: _____

Q7. Computing. Explain input, process and output using a ticket machine.

Answer: _____

Answer: _____

Q8. Computing. Write pseudocode using IF/ELSE for a homework app.

Answer: _____

Answer: _____

Q9. Computing. Explain why AND gives fewer database results than OR.

Answer: _____

Answer: _____

Q10. Computing. Describe one possible bug in a booking-system flowchart.

Answer: _____

Answer: _____

Computing Beacon Set 2 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Computing. Explain input, process and output using a ticket machine.

Answer: _____

Answer: _____

Q2. Computing. Write pseudocode using IF/ELSE for a homework app.

Answer: _____

Answer: _____

Q3. Computing. Explain why AND gives fewer database results than OR.

Answer: _____

Answer: _____

Q4. Computing. Describe one possible bug in a booking-system flowchart.

Answer: _____

Answer: _____

Q5. Computing. Explain input, process and output using a ticket machine.

Answer: _____

Answer: _____

Q6. Computing. Write pseudocode using IF/ELSE for a homework app.

Answer: _____

Answer: _____

Q7. Computing. Explain why AND gives fewer database results than OR.

Answer: _____

Answer: _____

Q8. Computing. Describe one possible bug in a booking-system flowchart.

Answer: _____

Answer: _____

Q9. Computing. Explain input, process and output using a ticket machine.

Answer: _____

Answer: _____

Q10. Computing. Write pseudocode using IF/ELSE for a homework app.

Answer: _____

Answer: _____

Computing Beacon Set 3 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Computing. Explain why AND gives fewer database results than OR.

Answer: _____

Answer: _____

Q2. Computing. Describe one possible bug in a booking-system flowchart.

Answer: _____

Answer: _____

Q3. Computing. Explain input, process and output using a ticket machine.

Answer: _____

Answer: _____

Q4. Computing. Write pseudocode using IF/ELSE for a homework app.

Answer: _____

Answer: _____

Q5. Computing. Explain why AND gives fewer database results than OR.

Answer: _____

Answer: _____

Q6. Computing. Describe one possible bug in a booking-system flowchart.

Answer: _____

Answer: _____

Q7. Computing. Explain input, process and output using a ticket machine.

Answer: _____

Answer: _____

Q8. Computing. Write pseudocode using IF/ELSE for a homework app.

Answer: _____

Answer: _____

Q9. Computing. Explain why AND gives fewer database results than OR.

Answer: _____

Answer: _____

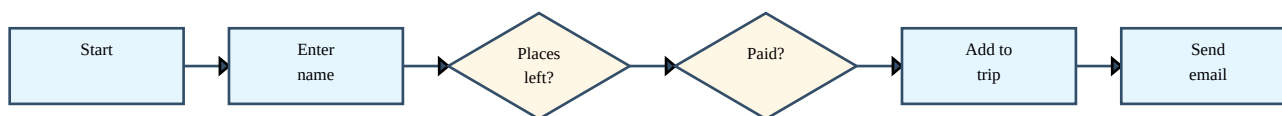
Q10. Computing. Describe one possible bug in a booking-system flowchart.

Answer: _____

Answer: _____

Computing Diagram / Visual Challenge 1

Computing stimulus: school trip booking algorithm



NO -> waiting list

NO -> request payment

Possible bug: payment check happens after place check, but not after waiting list update.

Use the visual stimulus above. These questions require interpreting the diagram rather than simply remembering facts.

Q1. Computing. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q2. Computing. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q3. Computing. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q4. Computing. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q5. Computing. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q6. Computing. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

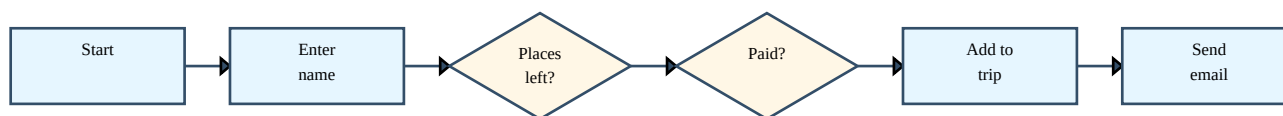
Answer: _____

Answer: _____

Answer: _____

Computing Diagram / Visual Challenge 2

Computing stimulus: school trip booking algorithm



NO -> waiting list

NO -> request payment

Possible bug: payment check happens after place check, but not after waiting list update.

Use the visual stimulus above. These questions require interpreting the diagram rather than simply remembering facts.

Q1. Computing. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q2. Computing. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q3. Computing. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q4. Computing. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q5. Computing. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q6. Computing. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Computing Level 4 Stretch Challenge 1

These are the hardest questions in the chapter. They may combine subject knowledge, interpretation and explanation.

Q1. Computing. Which bug is most likely if valid pupils are rejected by a booking system?

- A. The database has names
- B. The true/false branch is reversed
- C. The font is too small
- D. The output is colourful

Q2. Computing. Describe one possible bug in a booking-system flowchart.

Answer: _____

Answer: _____

Q3. Computing. A database query asks for Year 6 AND Music Club. Which record matches?

- A. Year 5 pupil in Music Club
- B. Year 6 pupil in Football Club
- C. Any Music Club pupil
- D. Year 6 pupil in Music Club

Q4. Computing. Write pseudocode using IF/ELSE for a homework app.

Answer: _____

Answer: _____

Q5. Computing. Which bug is most likely if valid pupils are rejected by a booking system?

- A. The database has names
- B. The true/false branch is reversed
- C. The font is too small
- D. The output is colourful

Q6. Computing. Describe one possible bug in a booking-system flowchart.

Answer: _____

Answer: _____

Q7. Computing. A database query asks for Year 6 AND Music Club. Which record matches?

- A. Year 5 pupil in Music Club
- B. Year 6 pupil in Football Club
- C. Any Music Club pupil
- D. Year 6 pupil in Music Club

Q8. Computing. Write pseudocode using IF/ELSE for a homework app.

Answer: _____

Answer: _____

Computing Level 4 Stretch Challenge 2

These are the hardest questions in the chapter. They may combine subject knowledge, interpretation and explanation.

Q1. Computing. A database query asks for Year 6 AND Music Club. Which record matches?

- A. Year 5 pupil in Music Club
- B. Year 6 pupil in Football Club
- C. Any Music Club pupil
- D. Year 6 pupil in Music Club

Q2. Computing. Describe one possible bug in a booking-system flowchart.

Answer: _____

Answer: _____

Q3. Computing. Which bug is most likely if valid pupils are rejected by a booking system?

- A. The database has names
- B. The true/false branch is reversed
- C. The font is too small
- D. The output is colourful

Q4. Computing. Write pseudocode using IF/ELSE for a homework app.

Answer: _____

Answer: _____

Q5. Computing. A database query asks for Year 6 AND Music Club. Which record matches?

- A. Year 5 pupil in Music Club
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Q6. Computing. Describe one possible bug in a booking-system flowchart.

Answer: _____

Answer: _____

Q7. Computing. Which bug is most likely if valid pupils are rejected by a booking system?

- A. The database has names
- B. The true/false branch is reversed
- C. The font is too small
- D. The output is colourful

Q8. Computing. Write pseudocode using IF/ELSE for a homework app.

Answer: _____

Answer: _____

Computing Answers and Explanations

Set	Q	Answer	Explanation
A1	1	D	AND requires both conditions.
A1	2	C	Four right turns can form a square path.
A1	3	B	A reversed condition sends correct users the wrong way.
A1	4	A	>= includes equality.
A1	5	D	AND requires both conditions.
A1	6	C	Four right turns can form a square path.
A1	7	B	A reversed condition sends correct users the wrong way.
A1	8	A	>= includes equality.
A1	9	D	AND requires both conditions.
A1	10	C	Four right turns can form a square path.
A1	11	B	A reversed condition sends correct users the wrong way.
A1	12	A	>= includes equality.
A2	1	D	AND requires both conditions.
A2	2	C	Four right turns can form a square path.
A2	3	B	A reversed condition sends correct users the wrong way.
A2	4	A	>= includes equality.

Set	Q	Answer	Explanation
A2	5	D	AND requires both conditions.
A2	6	C	Four right turns can form a square path.
A2	7	B	A reversed condition sends correct users the wrong way.
A2	8	A	>= includes equality.
A2	9	D	AND requires both conditions.
A2	10	C	Four right turns can form a square path.
A2	11	B	A reversed condition sends correct users the wrong way.
A2	12	A	>= includes equality.
A3	1	D	AND requires both conditions.
A3	2	C	Four right turns can form a square path.
A3	3	B	A reversed condition sends correct users the wrong way.
A3	4	A	>= includes equality.
A3	5	D	AND requires both conditions.
A3	6	C	Four right turns can form a square path.
A3	7	B	A reversed condition sends correct users the wrong way.
A3	8	A	>= includes equality.

Set	Q	Answer	Explanation
A3	9	D	AND requires both conditions.
A3	10	C	Four right turns can form a square path.
A3	11	B	A reversed condition sends correct users the wrong way.
A3	12	A	>= includes equality.
A4	1	D	AND requires both conditions.
A4	2	C	Four right turns can form a square path.
A4	3	B	A reversed condition sends correct users the wrong way.
A4	4	A	>= includes equality.
A4	5	D	AND requires both conditions.
A4	6	C	Four right turns can form a square path.
A4	7	B	A reversed condition sends correct users the wrong way.
A4	8	A	>= includes equality.
A4	9	D	AND requires both conditions.
A4	10	C	Four right turns can form a square path.
A4	11	B	A reversed condition sends correct users the wrong way.

Set	Q	Answer	Explanation
A4	12	A	$\geq$ includes equality.

Beacon answers should be marked for accuracy, vocabulary, reasoning and clarity. Accept any answer that is logically correct and uses the subject concept precisely.

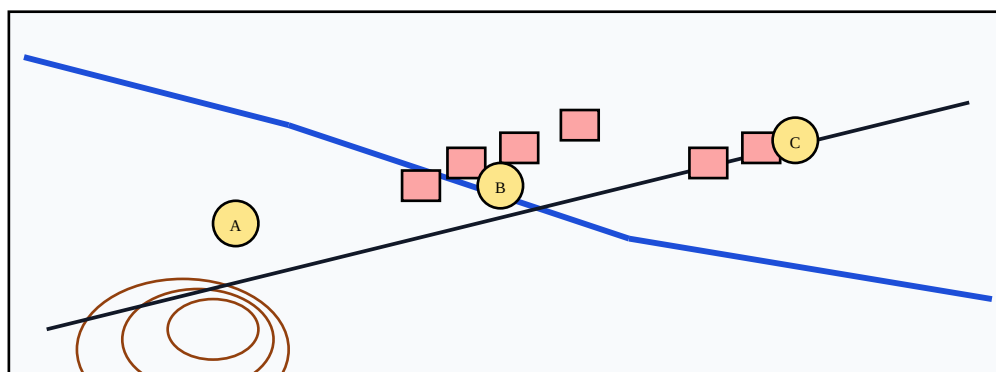
Chapter 5: Geography - Hard KS3-Bridge Practice

This chapter trains advanced 11+ thinking in Geography. The focus is not simple memory; the questions require interpretation, evidence, diagrams, comparison and precise explanation.

Subject skill map

- Understand and use specialist Geography vocabulary precisely.
- Interpret diagrams, charts, tables or visual evidence.
- Eliminate tempting but weaker answer choices.
- Write short answers using exact terminology.
- Explain reasoning clearly under timed conditions.

Geography stimulus: flood-risk village map



Key: blue river, black road, red houses, brown contours, yellow fieldwork stations

Geography Vocabulary Bank - 35 Hard Words

For each word, learn the meaning and how it might be tested in a hard question.

Word	Meaning	How it is tested / used
settlement	Key settlement concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
urban	Key urban concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
rural	Key rural concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
population density	number of people per area	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
migration	Key migration concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
fieldwork	Key fieldwork concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
sample	Key sample concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
bias	Key bias concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
questionnaire	Key questionnaire concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
sound meter	Key sound meter concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
map scale	Key map scale concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
grid reference	Key grid reference concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
compass bearing	Key compass bearing concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
contour	Key contour concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
tributary	Key tributary concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
source	Key source concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
mouth	Key mouth concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
erosion	Key erosion concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
deposition	Key deposition concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
flood plain	Key flood plain concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
climate	Key climate concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
weather	Key weather concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
microclimate	Key microclimate concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
renewable resource	Key renewable resource concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
sustainability	Key sustainability concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
pollution	Key pollution concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
habitat	Key habitat concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
land use	Key land use concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
transport link	Key transport link concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
economic activity	Key economic activity concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
human feature	Key human feature concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
physical feature	Key physical feature concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
region	Key region concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
environmental impact	Key environmental impact concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.
data interpretation	Key data interpretation concept used in harder applied questions	Use this term when explaining geography reasoning, interpreting a diagram, or writing a precise Beacon answer.

Geography Vocabulary Application Drill 1

Use the target word accurately in context. Do not write a vague sentence. Your sentence must show the meaning.

1. Target word: settlement. Write a precise sentence connected to Geography.

Sentence: _____

2. Target word: urban. Write a precise sentence connected to Geography.

Sentence: _____

3. Target word: rural. Write a precise sentence connected to Geography.

Sentence: _____

4. Target word: population density. Write a precise sentence connected to Geography.

Sentence: _____

5. Target word: migration. Write a precise sentence connected to Geography.

Sentence: _____

6. Target word: fieldwork. Write a precise sentence connected to Geography.

Sentence: _____

7. Target word: sample. Write a precise sentence connected to Geography.

Sentence: _____

8. Target word: bias. Write a precise sentence connected to Geography.

Sentence: _____

9. Target word: questionnaire. Write a precise sentence connected to Geography.

Sentence: _____

10. Target word: sound meter. Write a precise sentence connected to Geography.

Sentence: _____

11. Target word: map scale. Write a precise sentence connected to Geography.

Sentence: _____

12. Target word: grid reference. Write a precise sentence connected to Geography.

Sentence: _____

Geography Vocabulary Application Drill 2

Use the target word accurately in context. Do not write a vague sentence. Your sentence must show the meaning.

1. Target word: compass bearing. Write a precise sentence connected to Geography.

Sentence: _____

2. Target word: contour. Write a precise sentence connected to Geography.

Sentence: _____

3. Target word: tributary. Write a precise sentence connected to Geography.

Sentence: _____

4. Target word: source. Write a precise sentence connected to Geography.

Sentence: _____

5. Target word: mouth. Write a precise sentence connected to Geography.

Sentence: _____

6. Target word: erosion. Write a precise sentence connected to Geography.

Sentence: _____

7. Target word: deposition. Write a precise sentence connected to Geography.

Sentence: _____

8. Target word: flood plain. Write a precise sentence connected to Geography.

Sentence: _____

9. Target word: climate. Write a precise sentence connected to Geography.

Sentence: _____

10. Target word: weather. Write a precise sentence connected to Geography.

Sentence: _____

11. Target word: microclimate. Write a precise sentence connected to Geography.

Sentence: _____

12. Target word: renewable resource. Write a precise sentence connected to Geography.

Sentence: _____

Geography Worked Examples - Hard Reasoning

Worked Example 1. Which pair best combines human and physical geography?

- A. A poem and a painting
- B. A triangle and a prism
- C. A melody and tempo
- D. Road traffic affecting riverside homes

Answer: D. Road traffic is human; river/homes place context includes physical/human interaction.

Worked Example 2. Why collect data at morning and afternoon rush hour?

- A. Rivers reverse every day
- B. Questionnaires need no sample
- C. Traffic and noise vary by time
- D. Maps stop working at noon

Answer: C. Time affects traffic volume and noise.

Worked Example 3. Which conclusion is strongest?

- A. I disliked the traffic.
- B. Noise readings were highest near station C during rush hour.
- C. The village felt bad.
- D. Roads are always noisy.

Answer: B. It uses evidence, location and timing.

Worked Example 4. A fieldwork sample only asks people living far from the road. What is the main weakness?

- A. Sample bias
- B. Too much reliability
- C. No human geography
- D. No physical feature

Answer: A. The sample does not represent affected residents.

Geography Adventure Set 1 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Geography. Which pair best combines human and physical geography?

- A. A poem and a painting
- B. A triangle and a prism
- C. A melody and tempo
- D. Road traffic affecting riverside homes

Q2. Geography. Why collect data at morning and afternoon rush hour?

- A. Rivers reverse every day
- B. Questionnaires need no sample
- C. Traffic and noise vary by time
- D. Maps stop working at noon

Q3. Geography. Which conclusion is strongest?

- A. I disliked the traffic.
- B. Noise readings were highest near station C during rush hour.
- C. The village felt bad.
- D. Roads are always noisy.

Q4. Geography. A fieldwork sample only asks people living far from the road. What is the main weakness?

- A. Sample bias
- B. Too much reliability
- C. No human geography
- D. No physical feature

Q5. Geography. Which pair best combines human and physical geography?

- A. A poem and a painting
- B. A triangle and a prism
- C. A melody and tempo
- D. Road traffic affecting riverside homes

Q6. Geography. Why collect data at morning and afternoon rush hour?

- A. Rivers reverse every day
- B. Questionnaires need no sample
- C. Traffic and noise vary by time
- D. Maps stop working at noon

Q7. Geography. Which conclusion is strongest?

- A. I disliked the traffic.
- B. Noise readings were highest near station C during rush hour.
- C. The village felt bad.
- D. Roads are always noisy.

Q8. Geography. A fieldwork sample only asks people living far from the road. What is the main weakness?

- A. Sample bias
- B. Too much reliability
- C. No human geography
- D. No physical feature

Q9. Geography. Which pair best combines human and physical geography?

- A. A poem and a painting
- B. A triangle and a prism
- C. A melody and tempo
- D. Road traffic affecting riverside homes

Q10. Geography. Why collect data at morning and afternoon rush hour?

- A. Rivers reverse every day
- B. Questionnaires need no sample
- C. Traffic and noise vary by time
- D. Maps stop working at noon

Q11. Geography. Which conclusion is strongest?

- A. I disliked the traffic.
- B. Noise readings were highest near station C during rush hour.
- C. The village felt bad.
- D. Roads are always noisy.

Q12. Geography. A fieldwork sample only asks people living far from the road. What is the main weakness?

- A. Sample bias
- B. Too much reliability
- C. No human geography
- D. No physical feature

Geography Adventure Set 2 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Geography. Which pair best combines human and physical geography?

- A. A poem and a painting
- B. A triangle and a prism
- C. A melody and tempo
- D. Road traffic affecting riverside homes

Q2. Geography. Why collect data at morning and afternoon rush hour?

- A. Rivers reverse every day
- B. Questionnaires need no sample
- C. Traffic and noise vary by time
- D. Maps stop working at noon

Q3. Geography. Which conclusion is strongest?

- A. I disliked the traffic.
- B. Noise readings were highest near station C during rush hour.
- C. The village felt bad.
- D. Roads are always noisy.

Q4. Geography. A fieldwork sample only asks people living far from the road. What is the main weakness?

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Q6. Geography. Why collect data at morning and afternoon rush hour?

- A. Rivers reverse every day
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- C. Traffic and noise vary by time
- D. Maps stop working at noon

Q7. Geography. Which conclusion is strongest?

- A. I disliked the traffic.
- B. Noise readings were highest near station C during rush hour.
- C. The village felt bad.
- D. Roads are always noisy.

Q8. Geography. A fieldwork sample only asks people living far from the road. What is the main weakness?

- A. Sample bias
- B. Too much reliability
- C. No human geography
- D. No physical feature

Q9. Geography. Which pair best combines human and physical geography?

- A. A poem and a painting
- B. A triangle and a prism
- C. A melody and tempo
- D. Road traffic affecting riverside homes

Q10. Geography. Why collect data at morning and afternoon rush hour?

- A. Rivers reverse every day
- B. Questionnaires need no sample
- C. Traffic and noise vary by time
- D. Maps stop working at noon

Q11. Geography. Which conclusion is strongest?

- A. I disliked the traffic.
- B. Noise readings were highest near station C during rush hour.
- C. The village felt bad.
- D. Roads are always noisy.

Q12. Geography. A fieldwork sample only asks people living far from the road. What is the main weakness?

- A. Sample bias
- B. Too much reliability
- C. No human geography
- D. No physical feature

Geography Adventure Set 3 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Geography. Which pair best combines human and physical geography?

- A. A poem and a painting
- B. A triangle and a prism
- C. A melody and tempo
- D. Road traffic affecting riverside homes

Q2. Geography. Why collect data at morning and afternoon rush hour?

- A. Rivers reverse every day
- B. Questionnaires need no sample
- C. Traffic and noise vary by time
- D. Maps stop working at noon

Q3. Geography. Which conclusion is strongest?

- A. I disliked the traffic.
- B. Noise readings were highest near station C during rush hour.
- C. The village felt bad.
- D. Roads are always noisy.

Q4. Geography. A fieldwork sample only asks people living far from the road. What is the main weakness?

- A. Sample bias
- B. Too much reliability
- C. No human geography
- D. No physical feature

Q5. Geography. Which pair best combines human and physical geography?

- A. A poem and a painting
- B. A triangle and a prism
- C. A melody and tempo
- D. Road traffic affecting riverside homes

Q6. Geography. Why collect data at morning and afternoon rush hour?

- A. Rivers reverse every day
- B. Questionnaires need no sample
- C. Traffic and noise vary by time
- D. Maps stop working at noon

Q7. Geography. Which conclusion is strongest?

- A. I disliked the traffic.
- B. Noise readings were highest near station C during rush hour.
- C. The village felt bad.
- D. Roads are always noisy.

Q8. Geography. A fieldwork sample only asks people living far from the road. What is the main weakness?

- A. Sample bias
- B. Too much reliability
- C. No human geography
- D. No physical feature

Q9. Geography. Which pair best combines human and physical geography?

- A. A poem and a painting
- B. A triangle and a prism
- C. A melody and tempo
- D. Road traffic affecting riverside homes

Q10. Geography. Why collect data at morning and afternoon rush hour?

- A. Rivers reverse every day
- B. Questionnaires need no sample
- C. Traffic and noise vary by time
- D. Maps stop working at noon

Q11. Geography. Which conclusion is strongest?

- A. I disliked the traffic.
- B. Noise readings were highest near station C during rush hour.
- C. The village felt bad.
- D. Roads are always noisy.

Q12. Geography. A fieldwork sample only asks people living far from the road. What is the main weakness?

- A. Sample bias
- B. Too much reliability
- C. No human geography
- D. No physical feature

Geography Adventure Set 4 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Geography. Which pair best combines human and physical geography?

- A. A poem and a painting
- B. A triangle and a prism
- C. A melody and tempo
- D. Road traffic affecting riverside homes

Q2. Geography. Why collect data at morning and afternoon rush hour?

- A. Rivers reverse every day
- B. Questionnaires need no sample
- C. Traffic and noise vary by time
- D. Maps stop working at noon

Q3. Geography. Which conclusion is strongest?

- A. I disliked the traffic.
- B. Noise readings were highest near station C during rush hour.
- C. The village felt bad.
- D. Roads are always noisy.

Q4. Geography. A fieldwork sample only asks people living far from the road. What is the main weakness?

- A. Sample bias
- B. Too much reliability
- C. No human geography
- D. No physical feature

Q5. Geography. Which pair best combines human and physical geography?

- A. A poem and a painting
- B. A triangle and a prism
- C. A melody and tempo
- D. Road traffic affecting riverside homes

Q6. Geography. Why collect data at morning and afternoon rush hour?

- A. Rivers reverse every day
- B. Questionnaires need no sample
- C. Traffic and noise vary by time
- D. Maps stop working at noon

Q7. Geography. Which conclusion is strongest?

- A. I disliked the traffic.
- B. Noise readings were highest near station C during rush hour.
- C. The village felt bad.
- D. Roads are always noisy.

Q8. Geography. A fieldwork sample only asks people living far from the road. What is the main weakness?

- A. Sample bias
- B. Too much reliability
- C. No human geography
- D. No physical feature

Q9. Geography. Which pair best combines human and physical geography?

- A. A poem and a painting
- B. A triangle and a prism
- C. A melody and tempo
- D. Road traffic affecting riverside homes

Q10. Geography. Why collect data at morning and afternoon rush hour?

- A. Rivers reverse every day
- B. Questionnaires need no sample
- C. Traffic and noise vary by time
- D. Maps stop working at noon

Q11. Geography. Which conclusion is strongest?

- A. I disliked the traffic.
- B. Noise readings were highest near station C during rush hour.
- C. The village felt bad.
- D. Roads are always noisy.

Q12. Geography. A fieldwork sample only asks people living far from the road. What is the main weakness?

- A. Sample bias
- B. Too much reliability
- C. No human geography
- D. No physical feature

Geography Beacon Set 1 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Geography. Explain why sample bias weakens a questionnaire.

Answer: _____

Answer: _____

Q2. Geography. Describe how contour lines can show steep land.

Answer: _____

Answer: _____

Q3. Geography. Explain one human and one physical feature from a village map.

Answer: _____

Answer: _____

Q4. Geography. Design a fair fieldwork plan to measure road noise.

Answer: _____

Answer: _____

Q5. Geography. Explain why sample bias weakens a questionnaire.

Answer: _____

Answer: _____

Q6. Geography. Describe how contour lines can show steep land.

Answer: _____

Answer: _____

Q7. Geography. Explain one human and one physical feature from a village map.

Answer: _____

Answer: _____

Q8. Geography. Design a fair fieldwork plan to measure road noise.

Answer: _____

Answer: _____

Q9. Geography. Explain why sample bias weakens a questionnaire.

Answer: _____

Answer: _____

Q10. Geography. Describe how contour lines can show steep land.

Answer: _____

Answer: _____

Geography Beacon Set 2 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Geography. Explain one human and one physical feature from a village map.

Answer: _____

Answer: _____

Q2. Geography. Design a fair fieldwork plan to measure road noise.

Answer: _____

Answer: _____

Q3. Geography. Explain why sample bias weakens a questionnaire.

Answer: _____

Answer: _____

Q4. Geography. Describe how contour lines can show steep land.

Answer: _____

Answer: _____

Q5. Geography. Explain one human and one physical feature from a village map.

Answer: _____

Answer: _____

Q6. Geography. Design a fair fieldwork plan to measure road noise.

Answer: _____

Answer: _____

Q7. Geography. Explain why sample bias weakens a questionnaire.

Answer: _____

Answer: _____

Q8. Geography. Describe how contour lines can show steep land.

Answer: _____

Answer: _____

Q9. Geography. Explain one human and one physical feature from a village map.

Answer: _____

Answer: _____

Q10. Geography. Design a fair fieldwork plan to measure road noise.

Answer: _____

Answer: _____

Geography Beacon Set 3 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Geography. Explain why sample bias weakens a questionnaire.

Answer: _____

Answer: _____

Q2. Geography. Describe how contour lines can show steep land.

Answer: _____

Answer: _____

Q3. Geography. Explain one human and one physical feature from a village map.

Answer: _____

Answer: _____

Q4. Geography. Design a fair fieldwork plan to measure road noise.

Answer: _____

Answer: _____

Q5. Geography. Explain why sample bias weakens a questionnaire.

Answer: _____

Answer: _____

Q6. Geography. Describe how contour lines can show steep land.

Answer: _____

Answer: _____

Q7. Geography. Explain one human and one physical feature from a village map.

Answer: _____

Answer: _____

Q8. Geography. Design a fair fieldwork plan to measure road noise.

Answer: _____

Answer: _____

Q9. Geography. Explain why sample bias weakens a questionnaire.

Answer: _____

Answer: _____

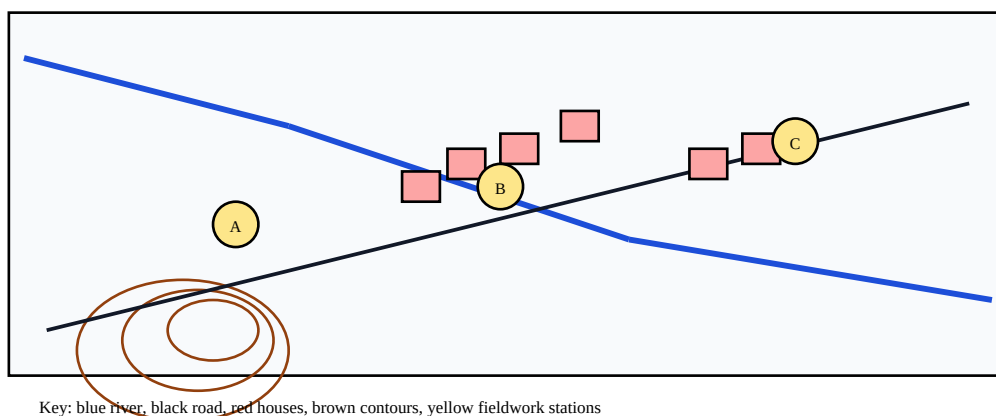
Q10. Geography. Describe how contour lines can show steep land.

Answer: _____

Answer: _____

Geography Diagram / Visual Challenge 1

Geography stimulus: flood-risk village map



Key: blue river, black road, red houses, brown contours, yellow fieldwork stations

Use the visual stimulus above. These questions require interpreting the diagram rather than simply remembering facts.

Q1. Geography. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q2. Geography. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q3. Geography. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q4. Geography. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q5. Geography. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q6. Geography. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

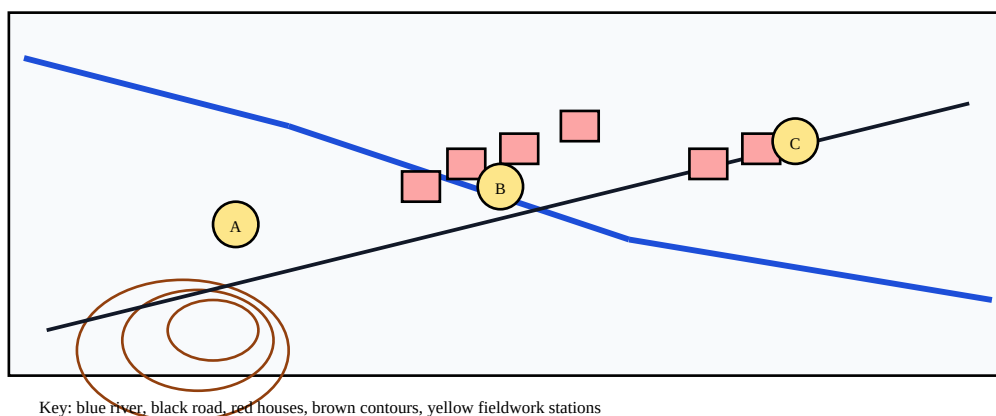
Answer: _____

Answer: _____

Answer: _____

Geography Diagram / Visual Challenge 2

Geography stimulus: flood-risk village map



Key: blue river, black road, red houses, brown contours, yellow fieldwork stations

Use the visual stimulus above. These questions require interpreting the diagram rather than simply remembering facts.

Q1. Geography. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q2. Geography. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q3. Geography. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q4. Geography. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q5. Geography. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q6. Geography. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Geography Level 4 Stretch Challenge 1

These are the hardest questions in the chapter. They may combine subject knowledge, interpretation and explanation.

Q1. Geography. Which conclusion is strongest?

- A. I disliked the traffic.
- B. Noise readings were highest near station C during rush hour.
- C. The village felt bad.
- D. Roads are always noisy.

Q2. Geography. Describe how contour lines can show steep land.

Answer: _____

Answer: _____

Q3. Geography. Which pair best combines human and physical geography?

- A. A poem and a painting
- B. A triangle and a prism
- C. A melody and tempo
- D. Road traffic affecting riverside homes

Q4. Geography. Design a fair fieldwork plan to measure road noise.

Answer: _____

Answer: _____

Q5. Geography. Which conclusion is strongest?

- A. I disliked the traffic.
- B. Noise readings were highest near station C during rush hour.
- C. The village felt bad.
- D. Roads are always noisy.

Q6. Geography. Describe how contour lines can show steep land.

Answer: _____

Answer: _____

Q7. Geography. Which pair best combines human and physical geography?

- A. A poem and a painting
- B. A triangle and a prism
- C. A melody and tempo
- D. Road traffic affecting riverside homes

Q8. Geography. Design a fair fieldwork plan to measure road noise.

Answer: _____

Answer: _____

Geography Level 4 Stretch Challenge 2

These are the hardest questions in the chapter. They may combine subject knowledge, interpretation and explanation.

Q1. Geography. Which pair best combines human and physical geography?

- A. A poem and a painting
- B. A triangle and a prism
- C. A melody and tempo
- D. Road traffic affecting riverside homes

Q2. Geography. Describe how contour lines can show steep land.

Answer: _____

Answer: _____

Q3. Geography. Which conclusion is strongest?

- A. I disliked the traffic.
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- C. The village felt bad.
- D. Roads are always noisy.

Q4. Geography. Design a fair fieldwork plan to measure road noise.

Answer: _____

Answer: _____

Q5. Geography. Which pair best combines human and physical geography?

- A. A poem and a painting
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Q6. Geography. Describe how contour lines can show steep land.

Answer: _____

Answer: _____

Q7. Geography. Which conclusion is strongest?

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- C. The village felt bad.
- D. Roads are always noisy.

Q8. Geography. Design a fair fieldwork plan to measure road noise.

Answer: _____

Answer: _____

Geography Answers and Explanations

Set	Q	Answer	Explanation
A1	1	D	Road traffic is human; river/homes place context includes physical/human interaction.
A1	2	C	Time affects traffic volume and noise.
A1	3	B	It uses evidence, location and timing.
A1	4	A	The sample does not represent affected residents.
A1	5	D	Road traffic is human; river/homes place context includes physical/human interaction.
A1	6	C	Time affects traffic volume and noise.
A1	7	B	It uses evidence, location and timing.
A1	8	A	The sample does not represent affected residents.
A1	9	D	Road traffic is human; river/homes place context includes physical/human interaction.
A1	10	C	Time affects traffic volume and noise.
A1	11	B	It uses evidence, location and timing.
A1	12	A	The sample does not represent affected residents.
A2	1	D	Road traffic is human; river/homes place context includes physical/human interaction.
A2	2	C	Time affects traffic volume and noise.
A2	3	B	It uses evidence, location and timing.
A2	4	A	The sample does not represent affected residents.
Set	Q	Answer	Explanation
A2	5	D	Road traffic is human; river/homes place context includes physical/human interaction.
A2	6	C	Time affects traffic volume and noise.
A2	7	B	It uses evidence, location and timing.
A2	8	A	The sample does not represent affected residents.
A2	9	D	Road traffic is human; river/homes place context includes physical/human interaction.
A2	10	C	Time affects traffic volume and noise.
A2	11	B	It uses evidence, location and timing.
A2	12	A	The sample does not represent affected residents.
A3	1	D	Road traffic is human; river/homes place context includes physical/human interaction.
A3	2	C	Time affects traffic volume and noise.
A3	3	B	It uses evidence, location and timing.
A3	4	A	The sample does not represent affected residents.
A3	5	D	Road traffic is human; river/homes place context includes physical/human interaction.
A3	6	C	Time affects traffic volume and noise.
A3	7	B	It uses evidence, location and timing.
A3	8	A	The sample does not represent affected residents.
Set	Q	Answer	Explanation
A3	9	D	Road traffic is human; river/homes place context includes physical/human interaction.
A3	10	C	Time affects traffic volume and noise.
A3	11	B	It uses evidence, location and timing.
A3	12	A	The sample does not represent affected residents.
A4	1	D	Road traffic is human; river/homes place context includes physical/human interaction.
A4	2	C	Time affects traffic volume and noise.
A4	3	B	It uses evidence, location and timing.
A4	4	A	The sample does not represent affected residents.
A4	5	D	Road traffic is human; river/homes place context includes physical/human interaction.
A4	6	C	Time affects traffic volume and noise.
A4	7	B	It uses evidence, location and timing.
A4	8	A	The sample does not represent affected residents.
A4	9	D	Road traffic is human; river/homes place context includes physical/human interaction.
A4	10	C	Time affects traffic volume and noise.
A4	11	B	It uses evidence, location and timing.

Set	Q	Answer	Explanation
A4	12	A	The sample does not represent affected residents.

Beacon answers should be marked for accuracy, vocabulary, reasoning and clarity. Accept any answer that is logically correct and uses the subject concept precisely.

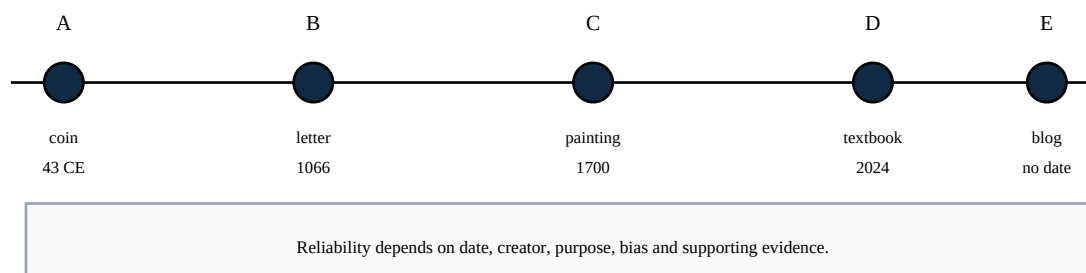
Chapter 6: History - Hard KS3-Bridge Practice

This chapter trains advanced 11+ thinking in History. The focus is not simple memory; the questions require interpretation, evidence, diagrams, comparison and precise explanation.

Subject skill map

- Understand and use specialist History vocabulary precisely.
- Interpret diagrams, charts, tables or visual evidence.
- Eliminate tempting but weaker answer choices.
- Write short answers using exact terminology.
- Explain reasoning clearly under timed conditions.

History stimulus: source reliability and chronology



History Vocabulary Bank - 35 Hard Words

For each word, learn the meaning and how it might be tested in a hard question.

Word	Meaning	How it is tested / used
chronology	Key chronology concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
primary source	Key primary source concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
secondary source	Key secondary source concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
artefact	Key artefact concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
evidence	Key evidence concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
reliability	Key reliability concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
bias	Key bias concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
Word	Meaning	How it is tested / used
interpretation	Key interpretation concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
cause	Key cause concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
consequence	Key consequence concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
significance	Key significance concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
continuity	Key continuity concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
change	Key change concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
empire	Key empire concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
Word	Meaning	How it is tested / used
civilisation	Key civilisation concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
monarch	Key monarch concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
parliament	Key parliament concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
reign	Key reign concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
legacy	Key legacy concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
invasion	Key invasion concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
settlement	Key settlement concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
trade	Key trade concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
industrialisation	Key industrialisation concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
archaeology	Key archaeology concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
excavation	Key excavation concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
reconstruction	Key reconstruction concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
oral history	Key oral history concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
provenance	Key provenance concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
perspective	Key perspective concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
anachronism	Key anachronism concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
motive	Key motive concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
context	Key context concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
corroboration	checking evidence with other evidence	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
timeline	Key timeline concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.
historical enquiry	Key historical enquiry concept used in harder applied questions	Use this term when explaining history reasoning, interpreting a diagram, or writing a precise Beacon answer.

History Vocabulary Application Drill 1

Use the target word accurately in context. Do not write a vague sentence. Your sentence must show the meaning.

1. Target word: chronology. Write a precise sentence connected to History.

Sentence: _____

2. Target word: primary source. Write a precise sentence connected to History.

Sentence: _____

3. Target word: secondary source. Write a precise sentence connected to History.

Sentence: _____

4. Target word: artefact. Write a precise sentence connected to History.

Sentence: _____

5. Target word: evidence. Write a precise sentence connected to History.

Sentence: _____

6. Target word: reliability. Write a precise sentence connected to History.

Sentence: _____

7. Target word: bias. Write a precise sentence connected to History.

Sentence: _____

8. Target word: interpretation. Write a precise sentence connected to History.

Sentence: _____

9. Target word: cause. Write a precise sentence connected to History.

Sentence: _____

10. Target word: consequence. Write a precise sentence connected to History.

Sentence: _____

11. Target word: significance. Write a precise sentence connected to History.

Sentence: _____

12. Target word: continuity. Write a precise sentence connected to History.

Sentence: _____

History Vocabulary Application Drill 2

Use the target word accurately in context. Do not write a vague sentence. Your sentence must show the meaning.

1. Target word: change. Write a precise sentence connected to History.

Sentence: _____

2. Target word: empire. Write a precise sentence connected to History.

Sentence: _____

3. Target word: civilisation. Write a precise sentence connected to History.

Sentence: _____

4. Target word: monarch. Write a precise sentence connected to History.

Sentence: _____

5. Target word: parliament. Write a precise sentence connected to History.

Sentence: _____

6. Target word: reign. Write a precise sentence connected to History.

Sentence: _____

7. Target word: legacy. Write a precise sentence connected to History.

Sentence: _____

8. Target word: invasion. Write a precise sentence connected to History.

Sentence: _____

9. Target word: settlement. Write a precise sentence connected to History.

Sentence: _____

10. Target word: trade. Write a precise sentence connected to History.

Sentence: _____

11. Target word: industrialisation. Write a precise sentence connected to History.

Sentence: _____

12. Target word: archaeology. Write a precise sentence connected to History.

Sentence: _____

History Worked Examples - Hard Reasoning

Worked Example 1. Why can two historians interpret the same event differently?

- A. Dates change every year
- B. One must be lying
- C. History has no sources
- D. They may use different evidence or viewpoints

Answer: D. Interpretation depends on evidence and perspective.

Worked Example 2. Which is a consequence rather than a cause?

- A. Wooden houses were close together
- B. A candle was left burning
- C. The city rebuilt wider streets after the fire
- D. The weather was dry

Answer: C. Rebuilding is an effect after the event.

Worked Example 3. What does corroboration mean?

- A. Ignoring disagreement
- B. Checking one source against another
- C. Making a source longer
- D. Drawing the source

Answer: B. Corroboration uses multiple sources.

Worked Example 4. Which source is usually strongest for what someone saw during an event?

- A. A diary written at the time
- B. A modern unsupported blog
- C. A fictional story
- D. A cartoon made later

Answer: A. A diary from the time is closer evidence.

History Adventure Set 1 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. History. Why can two historians interpret the same event differently?

- A. Dates change every year
- B. One must be lying
- C. History has no sources
- D. They may use different evidence or viewpoints

Q2. History. Which is a consequence rather than a cause?

- A. Wooden houses were close together
- B. A candle was left burning
- C. The city rebuilt wider streets after the fire
- D. The weather was dry

Q3. History. What does corroboration mean?

- A. Ignoring disagreement
- B. Checking one source against another
- C. Making a source longer
- D. Drawing the source

Q4. History. Which source is usually strongest for what someone saw during an event?

- A. A diary written at the time
- B. A modern unsupported blog
- C. A fictional story
- D. A cartoon made later

Q5. History. Why can two historians interpret the same event differently?

- A. Dates change every year
- B. One must be lying
- C. History has no sources
- D. They may use different evidence or viewpoints

Q6. History. Which is a consequence rather than a cause?

- A. Wooden houses were close together
- B. A candle was left burning
- C. The city rebuilt wider streets after the fire
- D. The weather was dry

Q7. History. What does corroboration mean?

- A. Ignoring disagreement
- B. Checking one source against another
- C. Making a source longer
- D. Drawing the source

Q8. History. Which source is usually strongest for what someone saw during an event?

- A. A diary written at the time
- B. A modern unsupported blog
- C. A fictional story
- D. A cartoon made later

Q9. History. Why can two historians interpret the same event differently?

- A. Dates change every year
- B. One must be lying
- C. History has no sources
- D. They may use different evidence or viewpoints

Q10. History. Which is a consequence rather than a cause?

- A. Wooden houses were close together
- B. A candle was left burning
- C. The city rebuilt wider streets after the fire
- D. The weather was dry

Q11. History. What does corroboration mean?

- A. Ignoring disagreement
- B. Checking one source against another
- C. Making a source longer
- D. Drawing the source

Q12. History. Which source is usually strongest for what someone saw during an event?

- A. A diary written at the time
- B. A modern unsupported blog
- C. A fictional story
- D. A cartoon made later

History Adventure Set 2 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. History. Why can two historians interpret the same event differently?

- A. Dates change every year
- B. One must be lying
- C. History has no sources
- D. They may use different evidence or viewpoints

Q2. History. Which is a consequence rather than a cause?

- A. Wooden houses were close together
- B. A candle was left burning
- C. The city rebuilt wider streets after the fire
- D. The weather was dry

Q3. History. What does corroboration mean?

- A. Ignoring disagreement
- B. Checking one source against another
- C. Making a source longer
- D. Drawing the source

Q4. History. Which source is usually strongest for what someone saw during an event?

- A. A diary written at the time
- B. A modern unsupported blog
- C. A fictional story
- D. A cartoon made later

Q5. History. Why can two historians interpret the same event differently?

- A. Dates change every year
- B. One must be lying
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- D. They may use different evidence or viewpoints

Q6. History. Which is a consequence rather than a cause?

- A. Wooden houses were close together
- B. A candle was left burning
- C. The city rebuilt wider streets after the fire
- D. The weather was dry

Q7. History. What does corroboration mean?

- A. Ignoring disagreement
- B. Checking one source against another
- C. Making a source longer
- D. Drawing the source

Q8. History. Which source is usually strongest for what someone saw during an event?

- A. A diary written at the time
- B. A modern unsupported blog
- C. A fictional story
- D. A cartoon made later

Q9. History. Why can two historians interpret the same event differently?

- A. Dates change every year
- B. One must be lying
- C. History has no sources
- D. They may use different evidence or viewpoints

Q10. History. Which is a consequence rather than a cause?

- A. Wooden houses were close together
- B. A candle was left burning
- C. The city rebuilt wider streets after the fire
- D. The weather was dry

Q11. History. What does corroboration mean?

- A. Ignoring disagreement
- B. Checking one source against another
- C. Making a source longer
- D. Drawing the source

Q12. History. Which source is usually strongest for what someone saw during an event?

- A. A diary written at the time
- B. A modern unsupported blog
- C. A fictional story
- D. A cartoon made later

History Adventure Set 3 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. History. Why can two historians interpret the same event differently?

- A. Dates change every year
- B. One must be lying
- C. History has no sources
- D. They may use different evidence or viewpoints

Q2. History. Which is a consequence rather than a cause?

- A. Wooden houses were close together
- B. A candle was left burning
- C. The city rebuilt wider streets after the fire
- D. The weather was dry

Q3. History. What does corroboration mean?

- A. Ignoring disagreement
- B. Checking one source against another
- C. Making a source longer
- D. Drawing the source

Q4. History. Which source is usually strongest for what someone saw during an event?

- A. A diary written at the time
- B. A modern unsupported blog
- C. A fictional story
- D. A cartoon made later

Q5. History. Why can two historians interpret the same event differently?

- A. Dates change every year
- B. One must be lying
- C. History has no sources
- D. They may use different evidence or viewpoints

Q6. History. Which is a consequence rather than a cause?

- A. Wooden houses were close together
- B. A candle was left burning
- C. The city rebuilt wider streets after the fire
- D. The weather was dry

Q7. History. What does corroboration mean?

- A. Ignoring disagreement
- B. Checking one source against another
- C. Making a source longer
- D. Drawing the source

Q8. History. Which source is usually strongest for what someone saw during an event?

- A. A diary written at the time
- B. A modern unsupported blog
- C. A fictional story
- D. A cartoon made later

Q9. History. Why can two historians interpret the same event differently?

- A. Dates change every year
- B. One must be lying
- C. History has no sources
- D. They may use different evidence or viewpoints

Q10. History. Which is a consequence rather than a cause?

- A. Wooden houses were close together
- B. A candle was left burning
- C. The city rebuilt wider streets after the fire
- D. The weather was dry

Q11. History. What does corroboration mean?

- A. Ignoring disagreement
- B. Checking one source against another
- C. Making a source longer
- D. Drawing the source

Q12. History. Which source is usually strongest for what someone saw during an event?

- A. A diary written at the time
- B. A modern unsupported blog
- C. A fictional story
- D. A cartoon made later

History Adventure Set 4 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. History. Why can two historians interpret the same event differently?

- A. Dates change every year
- B. One must be lying
- C. History has no sources
- D. They may use different evidence or viewpoints

Q2. History. Which is a consequence rather than a cause?

- A. Wooden houses were close together
- B. A candle was left burning
- C. The city rebuilt wider streets after the fire
- D. The weather was dry

Q3. History. What does corroboration mean?

- A. Ignoring disagreement
- B. Checking one source against another
- C. Making a source longer
- D. Drawing the source

Q4. History. Which source is usually strongest for what someone saw during an event?

- A. A diary written at the time
- B. A modern unsupported blog
- C. A fictional story
- D. A cartoon made later

Q5. History. Why can two historians interpret the same event differently?

- A. Dates change every year
- B. One must be lying
- C. History has no sources
- D. They may use different evidence or viewpoints

Q6. History. Which is a consequence rather than a cause?

- A. Wooden houses were close together
- B. A candle was left burning
- C. The city rebuilt wider streets after the fire
- D. The weather was dry

Q7. History. What does corroboration mean?

- A. Ignoring disagreement
- B. Checking one source against another
- C. Making a source longer
- D. Drawing the source

Q8. History. Which source is usually strongest for what someone saw during an event?

- A. A diary written at the time
- B. A modern unsupported blog
- C. A fictional story
- D. A cartoon made later

Q9. History. Why can two historians interpret the same event differently?

- A. Dates change every year
- B. One must be lying
- C. History has no sources
- D. They may use different evidence or viewpoints

Q10. History. Which is a consequence rather than a cause?

- A. Wooden houses were close together
- B. A candle was left burning
- C. The city rebuilt wider streets after the fire
- D. The weather was dry

Q11. History. What does corroboration mean?

- A. Ignoring disagreement
- B. Checking one source against another
- C. Making a source longer
- D. Drawing the source

Q12. History. Which source is usually strongest for what someone saw during an event?

- A. A diary written at the time
- B. A modern unsupported blog
- C. A fictional story
- D. A cartoon made later

History Beacon Set 1 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. History. Explain the difference between cause and consequence.

Answer: _____

Answer: _____

Q2. History. Write a historical enquiry question about a local event.

Answer: _____

Answer: _____

Q3. History. Explain how bias may affect a source.

Answer: _____

Answer: _____

Q4. History. Rank three sources by reliability and justify your answer.

Answer: _____

Answer: _____

Q5. History. Explain the difference between cause and consequence.

Answer: _____

Answer: _____

Q6. History. Write a historical enquiry question about a local event.

Answer: _____

Answer: _____

Q7. History. Explain how bias may affect a source.

Answer: _____

Answer: _____

Q8. History. Rank three sources by reliability and justify your answer.

Answer: _____

Answer: _____

Q9. History. Explain the difference between cause and consequence.

Answer: _____

Answer: _____

Q10. History. Write a historical enquiry question about a local event.

Answer: _____

Answer: _____

History Beacon Set 2 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. History. Explain how bias may affect a source.

Answer: _____

Answer: _____

Q2. History. Rank three sources by reliability and justify your answer.

Answer: _____

Answer: _____

Q3. History. Explain the difference between cause and consequence.

Answer: _____

Answer: _____

Q4. History. Write a historical enquiry question about a local event.

Answer: _____

Answer: _____

Q5. History. Explain how bias may affect a source.

Answer: _____

Answer: _____

Q6. History. Rank three sources by reliability and justify your answer.

Answer: _____

Answer: _____

Q7. History. Explain the difference between cause and consequence.

Answer: _____

Answer: _____

Q8. History. Write a historical enquiry question about a local event.

Answer: _____

Answer: _____

Q9. History. Explain how bias may affect a source.

Answer: _____

Answer: _____

Q10. History. Rank three sources by reliability and justify your answer.

Answer: _____

Answer: _____

History Beacon Set 3 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. History. Explain the difference between cause and consequence.

Answer: _____

Answer: _____

Q2. History. Write a historical enquiry question about a local event.

Answer: _____

Answer: _____

Q3. History. Explain how bias may affect a source.

Answer: _____

Answer: _____

Q4. History. Rank three sources by reliability and justify your answer.

Answer: _____

Answer: _____

Q5. History. Explain the difference between cause and consequence.

Answer: _____

Answer: _____

Q6. History. Write a historical enquiry question about a local event.

Answer: _____

Answer: _____

Q7. History. Explain how bias may affect a source.

Answer: _____

Answer: _____

Q8. History. Rank three sources by reliability and justify your answer.

Answer: _____

Answer: _____

Q9. History. Explain the difference between cause and consequence.

Answer: _____

Answer: _____

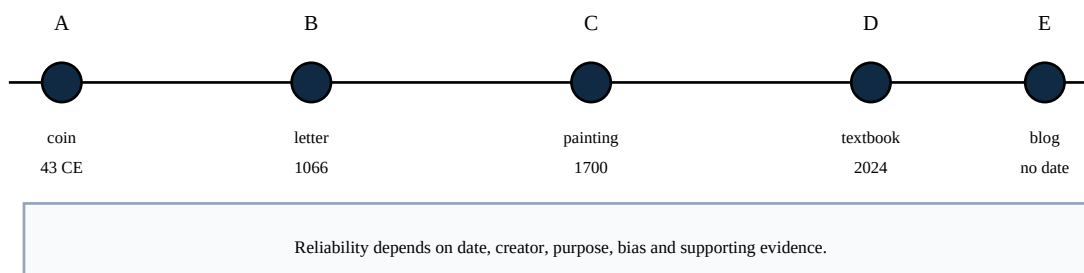
Q10. History. Write a historical enquiry question about a local event.

Answer: _____

Answer: _____

History Diagram / Visual Challenge 1

History stimulus: source reliability and chronology



Use the visual stimulus above. These questions require interpreting the diagram rather than simply remembering facts.

Q1. History. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q2. History. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q3. History. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q4. History. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q5. History. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q6. History. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

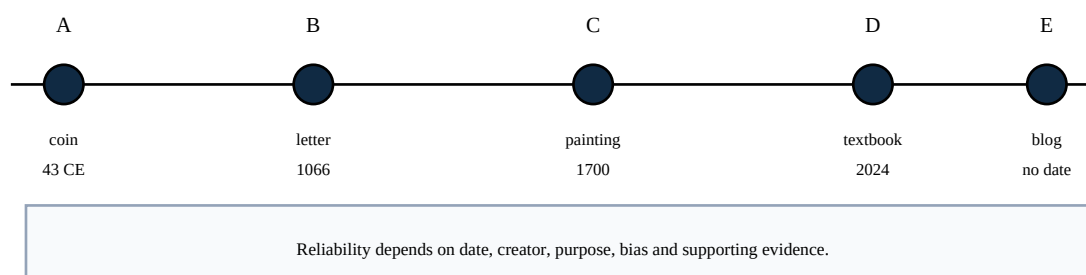
Answer: _____

Answer: _____

Answer: _____

History Diagram / Visual Challenge 2

History stimulus: source reliability and chronology



Use the visual stimulus above. These questions require interpreting the diagram rather than simply remembering facts.

Q1. History. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q2. History. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q3. History. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q4. History. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q5. History. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q6. History. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

History Level 4 Stretch Challenge 1

These are the hardest questions in the chapter. They may combine subject knowledge, interpretation and explanation.

Q1. History. What does corroboration mean?

- A. Ignoring disagreement
- B. Checking one source against another
- C. Making a source longer
- D. Drawing the source

Q2. History. Write a historical enquiry question about a local event.

Answer: _____

Answer: _____

Q3. History. Why can two historians interpret the same event differently?

- A. Dates change every year
- B. One must be lying
- C. History has no sources
- D. They may use different evidence or viewpoints

Q4. History. Rank three sources by reliability and justify your answer.

Answer: _____

Answer: _____

Q5. History. What does corroboration mean?

- A. Ignoring disagreement
- B. Checking one source against another
- C. Making a source longer
- D. Drawing the source

Q6. History. Write a historical enquiry question about a local event.

Answer: _____

Answer: _____

Q7. History. Why can two historians interpret the same event differently?

- A. Dates change every year
- B. One must be lying
- C. History has no sources
- D. They may use different evidence or viewpoints

Q8. History. Rank three sources by reliability and justify your answer.

Answer: _____

Answer: _____

History Level 4 Stretch Challenge 2

These are the hardest questions in the chapter. They may combine subject knowledge, interpretation and explanation.

Q1. History. Why can two historians interpret the same event differently?

- A. Dates change every year
- B. One must be lying
- C. History has no sources
- D. They may use different evidence or viewpoints

Q2. History. Write a historical enquiry question about a local event.

Answer: _____

Answer: _____

Q3. History. What does corroboration mean?

- A. Ignoring disagreement
- B. Checking one source against another
- C. Making a source longer
- D. Drawing the source

Q4. History. Rank three sources by reliability and justify your answer.

Answer: _____

Answer: _____

Q5. History. Why can two historians interpret the same event differently?

- A. Dates change every year
- B. One must be lying
- C. History has no sources
- D. They may use different evidence or viewpoints

Q6. History. Write a historical enquiry question about a local event.

Answer: _____

Answer: _____

Q7. History. What does corroboration mean?

- A. Ignoring disagreement
- B. Checking one source against another
- C. Making a source longer
- D. Drawing the source

Q8. History. Rank three sources by reliability and justify your answer.

Answer: _____

Answer: _____

History Answers and Explanations

Set	Q	Answer	Explanation
A1	1	D	Interpretation depends on evidence and perspective.
A1	2	C	Rebuilding is an effect after the event.
A1	3	B	Corroboration uses multiple sources.
A1	4	A	A diary from the time is closer evidence.
A1	5	D	Interpretation depends on evidence and perspective.
A1	6	C	Rebuilding is an effect after the event.
A1	7	B	Corroboration uses multiple sources.
A1	8	A	A diary from the time is closer evidence.
A1	9	D	Interpretation depends on evidence and perspective.
A1	10	C	Rebuilding is an effect after the event.
A1	11	B	Corroboration uses multiple sources.
A1	12	A	A diary from the time is closer evidence.
A2	1	D	Interpretation depends on evidence and perspective.
A2	2	C	Rebuilding is an effect after the event.
A2	3	B	Corroboration uses multiple sources.
A2	4	A	A diary from the time is closer evidence.

Set	Q	Answer	Explanation
A2	5	D	Interpretation depends on evidence and perspective.
A2	6	C	Rebuilding is an effect after the event.
A2	7	B	Corroboration uses multiple sources.
A2	8	A	A diary from the time is closer evidence.
A2	9	D	Interpretation depends on evidence and perspective.
A2	10	C	Rebuilding is an effect after the event.
A2	11	B	Corroboration uses multiple sources.
A2	12	A	A diary from the time is closer evidence.
A3	1	D	Interpretation depends on evidence and perspective.
A3	2	C	Rebuilding is an effect after the event.
A3	3	B	Corroboration uses multiple sources.
A3	4	A	A diary from the time is closer evidence.
A3	5	D	Interpretation depends on evidence and perspective.
A3	6	C	Rebuilding is an effect after the event.
A3	7	B	Corroboration uses multiple sources.
A3	8	A	A diary from the time is closer evidence.

Set	Q	Answer	Explanation
A3	9	D	Interpretation depends on evidence and perspective.
A3	10	C	Rebuilding is an effect after the event.
A3	11	B	Corroboration uses multiple sources.
A3	12	A	A diary from the time is closer evidence.
A4	1	D	Interpretation depends on evidence and perspective.
A4	2	C	Rebuilding is an effect after the event.
A4	3	B	Corroboration uses multiple sources.
A4	4	A	A diary from the time is closer evidence.
A4	5	D	Interpretation depends on evidence and perspective.
A4	6	C	Rebuilding is an effect after the event.
A4	7	B	Corroboration uses multiple sources.
A4	8	A	A diary from the time is closer evidence.
A4	9	D	Interpretation depends on evidence and perspective.
A4	10	C	Rebuilding is an effect after the event.
A4	11	B	Corroboration uses multiple sources.

Set	Q	Answer	Explanation
A4	12	A	A diary from the time is closer evidence.

Beacon answers should be marked for accuracy, vocabulary, reasoning and clarity. Accept any answer that is logically correct and uses the subject concept precisely.

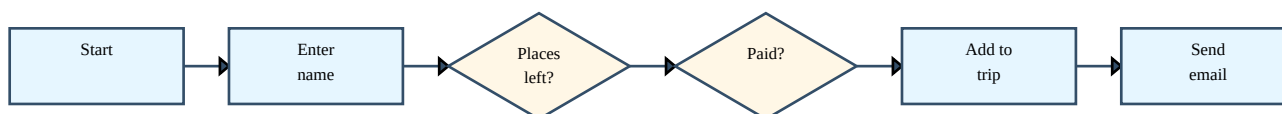
Chapter 7: Languages - Hard KS3-Bridge Practice

This chapter trains advanced 11+ thinking in Languages. The focus is not simple memory; the questions require interpretation, evidence, diagrams, comparison and precise explanation.

Subject skill map

- Understand and use specialist Languages vocabulary precisely.
- Interpret diagrams, charts, tables or visual evidence.
- Eliminate tempting but weaker answer choices.
- Write short answers using exact terminology.
- Explain reasoning clearly under timed conditions.

Computing stimulus: school trip booking algorithm



NO -> waiting list

NO -> request payment

Possible bug: payment check happens after place check, but not after waiting list update.

Languages Vocabulary Bank - 35 Hard Words

For each word, learn the meaning and how it might be tested in a hard question.

Word	Meaning	How it is tested / used
translate	Key translate concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
cognate	Key cognate concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
false friend	Key false friend concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
gender	Key gender concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
masculine	Key masculine concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
feminine	Key feminine concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
article	Key article concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
Word	Meaning	How it is tested / used
verb	Key verb concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
noun	Key noun concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
adjective	Key adjective concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
adverb	Key adverb concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
pronoun	Key pronoun concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
conjugation	Key conjugation concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
tense	Key tense concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
Word	Meaning	How it is tested / used
prefix	Key prefix concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
suffix	Key suffix concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
root	Key root concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
plural	Key plural concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
singular	Key singular concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
negative	Key negative concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
question word	Key question word concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
Word	Meaning	How it is tested / used
literal meaning	Key literal meaning concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
context clue	Key context clue concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
pronunciation	Key pronunciation concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
accent	Key accent concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
register	Key register concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
formal phrase	Key formal phrase concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
informal phrase	Key informal phrase concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
Word	Meaning	How it is tested / used
connective	Key connective concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
opinion phrase	Key opinion phrase concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
agreement	Key agreement concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
word order	Key word order concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
phrase	Key phrase concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
clause	Key clause concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.
pattern	Key pattern concept used in harder applied questions	Use this term when explaining languages reasoning, interpreting a diagram, or writing a precise Beacon answer.

Languages Vocabulary Application Drill 1

Use the target word accurately in context. Do not write a vague sentence. Your sentence must show the meaning.

1. Target word: translate. Write a precise sentence connected to Languages.

Sentence: _____

2. Target word: cognate. Write a precise sentence connected to Languages.

Sentence: _____

3. Target word: false friend. Write a precise sentence connected to Languages.

Sentence: _____

4. Target word: gender. Write a precise sentence connected to Languages.

Sentence: _____

5. Target word: masculine. Write a precise sentence connected to Languages.

Sentence: _____

6. Target word: feminine. Write a precise sentence connected to Languages.

Sentence: _____

7. Target word: article. Write a precise sentence connected to Languages.

Sentence: _____

8. Target word: verb. Write a precise sentence connected to Languages.

Sentence: _____

9. Target word: noun. Write a precise sentence connected to Languages.

Sentence: _____

10. Target word: adjective. Write a precise sentence connected to Languages.

Sentence: _____

11. Target word: adverb. Write a precise sentence connected to Languages.

Sentence: _____

12. Target word: pronoun. Write a precise sentence connected to Languages.

Sentence: _____

Languages Vocabulary Application Drill 2

Use the target word accurately in context. Do not write a vague sentence. Your sentence must show the meaning.

1. Target word: conjugation. Write a precise sentence connected to Languages.

Sentence: _____

2. Target word: tense. Write a precise sentence connected to Languages.

Sentence: _____

3. Target word: prefix. Write a precise sentence connected to Languages.

Sentence: _____

4. Target word: suffix. Write a precise sentence connected to Languages.

Sentence: _____

5. Target word: root. Write a precise sentence connected to Languages.

Sentence: _____

6. Target word: plural. Write a precise sentence connected to Languages.

Sentence: _____

7. Target word: singular. Write a precise sentence connected to Languages.

Sentence: _____

8. Target word: negative. Write a precise sentence connected to Languages.

Sentence: _____

9. Target word: question word. Write a precise sentence connected to Languages.

Sentence: _____

10. Target word: literal meaning. Write a precise sentence connected to Languages.

Sentence: _____

11. Target word: context clue. Write a precise sentence connected to Languages.

Sentence: _____

12. Target word: pronunciation. Write a precise sentence connected to Languages.

Sentence: _____

Languages Worked Examples - Hard Reasoning

Worked Example 1. Why are cognates useful but not always safe?

- A. They never help
- B. They are always numbers
- C. They remove grammar
- D. Some similar-looking words can be false friends

Answer: D. Cognates can mislead if meanings differ.

Worked Example 2. Which change is most likely when moving from singular to plural?

- A. The sentence must become past tense
- B. The accent always disappears
- C. The word may gain an ending or change form
- D. The word becomes a question

Answer: C. Plural forms often change endings/forms.

Worked Example 3. What helps most when translating an unknown phrase?

- A. Changing all nouns into verbs
- B. Context clues and word patterns
- C. Guessing the longest word
- D. Ignoring punctuation

Answer: B. Context helps meaning.

Worked Example 4. In a made-up language, 'bon-lun' means 12 and 'bon-mit' means 13. If 'lun' is 2 and 'mit' is 3, what does 'bon' likely mean?

- A. ten
- B. one
- C. twenty
- D. and

Answer: A. $12 = \text{ten} + 2$; $13 = \text{ten} + 3$.

Languages Adventure Set 1 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Languages. Why are cognates useful but not always safe?

- A. They never help
- B. They are always numbers
- C. They remove grammar
- D. Some similar-looking words can be false friends

Q2. Languages. Which change is most likely when moving from singular to plural?

- A. The sentence must become past tense
- B. The accent always disappears
- C. The word may gain an ending or change form
- D. The word becomes a question

Q3. Languages. What helps most when translating an unknown phrase?

- A. Changing all nouns into verbs
- B. Context clues and word patterns
- C. Guessing the longest word
- D. Ignoring punctuation

Q4. Languages. In a made-up language, 'bon-lun' means 12 and 'bon-mit' means 13. If 'lun' is 2 and 'mit' is 3, what does 'bon' likely mean?

- A. ten
- B. one
- C. twenty
- D. and

Q5. Languages. Why are cognates useful but not always safe?

- A. They never help
- B. They are always numbers
- C. They remove grammar
- D. Some similar-looking words can be false friends

Q6. Languages. Which change is most likely when moving from singular to plural?

- A. The sentence must become past tense
- B. The accent always disappears
- C. The word may gain an ending or change form
- D. The word becomes a question

Q7. Languages. What helps most when translating an unknown phrase?

- A. Changing all nouns into verbs
- B. Context clues and word patterns
- C. Guessing the longest word
- D. Ignoring punctuation

Q8. Languages. In a made-up language, 'bon-lun' means 12 and 'bon-mit' means 13. If 'lun' is 2 and 'mit' is 3, what does 'bon' likely mean?

- A. ten
- B. one
- C. twenty
- D. and

Q9. Languages. Why are cognates useful but not always safe?

- A. They never help
- B. They are always numbers
- C. They remove grammar

D. Some similar-looking words can be false friends

Q10. Languages. Which change is most likely when moving from singular to plural?

- A. The sentence must become past tense
- B. The accent always disappears
- C. The word may gain an ending or change form
- D. The word becomes a question

Q11. Languages. What helps most when translating an unknown phrase?

- A. Changing all nouns into verbs
- B. Context clues and word patterns
- C. Guessing the longest word
- D. Ignoring punctuation

Q12. Languages. In a made-up language, 'bon-lun' means 12 and 'bon-mit' means 13. If 'lun' is 2 and 'mit' is 3, what does 'bon' likely mean?

- A. ten
- B. one
- C. twenty
- D. and

Languages Adventure Set 2 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Languages. Why are cognates useful but not always safe?

- A. They never help
- B. They are always numbers
- C. They remove grammar
- D. Some similar-looking words can be false friends

Q2. Languages. Which change is most likely when moving from singular to plural?

- A. The sentence must become past tense
- B. The accent always disappears
- C. The word may gain an ending or change form
- D. The word becomes a question

Q3. Languages. What helps most when translating an unknown phrase?

- A. Changing all nouns into verbs
- B. Context clues and word patterns
- C. Guessing the longest word
- D. Ignoring punctuation

Q4. Languages. In a made-up language, 'bon-lun' means 12 and 'bon-mit' means 13. If 'lun' is 2 and 'mit' is 3, what does 'bon' likely mean?

- A. ten
- B. one
- C. twenty
- D. and

Q5. Languages. Why are cognates useful but not always safe?

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- A. The sentence must become past tense
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- C. The word may gain an ending or change form
- D. The word becomes a question

Q7. Languages. What helps most when translating an unknown phrase?

- A. Changing all nouns into verbs
- B. Context clues and word patterns
- C. Guessing the longest word
- D. Ignoring punctuation

Q8. Languages. In a made-up language, 'bon-lun' means 12 and 'bon-mit' means 13. If 'lun' is 2 and 'mit' is 3, what does 'bon' likely mean?

- A. ten
- B. one
- C. twenty
- D. and

Q9. Languages. Why are cognates useful but not always safe?

- A. They never help
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Q10. Languages. Which change is most likely when moving from singular to plural?

- A. The sentence must become past tense
- B. The accent always disappears
- C. The word may gain an ending or change form
- D. The word becomes a question

Q11. Languages. What helps most when translating an unknown phrase?

- A. Changing all nouns into verbs
- B. Context clues and word patterns
- C. Guessing the longest word
- D. Ignoring punctuation

Q12. Languages. In a made-up language, 'bon-lun' means 12 and 'bon-mit' means 13. If 'lun' is 2 and 'mit' is 3, what does 'bon' likely mean?

- A. ten
- B. one
- C. twenty
- D. and

Languages Adventure Set 3 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Languages. Why are cognates useful but not always safe?

- A. They never help
- B. They are always numbers
- C. They remove grammar
- D. Some similar-looking words can be false friends

Q2. Languages. Which change is most likely when moving from singular to plural?

- A. The sentence must become past tense
- B. The accent always disappears
- C. The word may gain an ending or change form
- D. The word becomes a question

Q3. Languages. What helps most when translating an unknown phrase?

- A. Changing all nouns into verbs
- B. Context clues and word patterns
- C. Guessing the longest word
- D. Ignoring punctuation

Q4. Languages. In a made-up language, 'bon-lun' means 12 and 'bon-mit' means 13. If 'lun' is 2 and 'mit' is 3, what does 'bon' likely mean?

- A. ten
- B. one
- C. twenty
- D. and

Q5. Languages. Why are cognates useful but not always safe?

- A. They never help
- B. They are always numbers
- C. They remove grammar
- D. Some similar-looking words can be false friends

Q6. Languages. Which change is most likely when moving from singular to plural?

- A. The sentence must become past tense
- B. The accent always disappears
- C. The word may gain an ending or change form
- D. The word becomes a question

Q7. Languages. What helps most when translating an unknown phrase?

- A. Changing all nouns into verbs
- B. Context clues and word patterns
- C. Guessing the longest word
- D. Ignoring punctuation

Q8. Languages. In a made-up language, 'bon-lun' means 12 and 'bon-mit' means 13. If 'lun' is 2 and 'mit' is 3, what does 'bon' likely mean?

- A. ten
- B. one
- C. twenty
- D. and

Q9. Languages. Why are cognates useful but not always safe?

- A. They never help
- B. They are always numbers
- C. They remove grammar

D. Some similar-looking words can be false friends

Q10. Languages. Which change is most likely when moving from singular to plural?

- A. The sentence must become past tense
- B. The accent always disappears
- C. The word may gain an ending or change form
- D. The word becomes a question

Q11. Languages. What helps most when translating an unknown phrase?

- A. Changing all nouns into verbs
- B. Context clues and word patterns
- C. Guessing the longest word
- D. Ignoring punctuation

Q12. Languages. In a made-up language, 'bon-lun' means 12 and 'bon-mit' means 13. If 'lun' is 2 and 'mit' is 3, what does 'bon' likely mean?

- A. ten
- B. one
- C. twenty
- D. and

Languages Adventure Set 4 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Languages. Why are cognates useful but not always safe?

- A. They never help
- B. They are always numbers
- C. They remove grammar
- D. Some similar-looking words can be false friends

Q2. Languages. Which change is most likely when moving from singular to plural?

- A. The sentence must become past tense
- B. The accent always disappears
- C. The word may gain an ending or change form
- D. The word becomes a question

Q3. Languages. What helps most when translating an unknown phrase?

- A. Changing all nouns into verbs
- B. Context clues and word patterns
- C. Guessing the longest word
- D. Ignoring punctuation

Q4. Languages. In a made-up language, 'bon-lun' means 12 and 'bon-mit' means 13. If 'lun' is 2 and 'mit' is 3, what does 'bon' likely mean?

- A. ten
- B. one
- C. twenty
- D. and

Q5. Languages. Why are cognates useful but not always safe?

- A. They never help
- B. They are always numbers
- C. They remove grammar
- D. Some similar-looking words can be false friends

Q6. Languages. Which change is most likely when moving from singular to plural?

- A. The sentence must become past tense
- B. The accent always disappears
- C. The word may gain an ending or change form
- D. The word becomes a question

Q7. Languages. What helps most when translating an unknown phrase?

- A. Changing all nouns into verbs
- B. Context clues and word patterns
- C. Guessing the longest word
- D. Ignoring punctuation

Q8. Languages. In a made-up language, 'bon-lun' means 12 and 'bon-mit' means 13. If 'lun' is 2 and 'mit' is 3, what does 'bon' likely mean?

- A. ten
- B. one
- C. twenty
- D. and

Q9. Languages. Why are cognates useful but not always safe?

- A. They never help
- B. They are always numbers
- C. They remove grammar

D. Some similar-looking words can be false friends

Q10. Languages. Which change is most likely when moving from singular to plural?

- A. The sentence must become past tense
- B. The accent always disappears
- C. The word may gain an ending or change form
- D. The word becomes a question

Q11. Languages. What helps most when translating an unknown phrase?

- A. Changing all nouns into verbs
- B. Context clues and word patterns
- C. Guessing the longest word
- D. Ignoring punctuation

Q12. Languages. In a made-up language, 'bon-lun' means 12 and 'bon-mit' means 13. If 'lun' is 2 and 'mit' is 3, what does 'bon' likely mean?

- A. ten
- B. one
- C. twenty
- D. and

Languages Beacon Set 1 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Languages. Give one example of a false friend and explain the risk.

Answer: _____

Answer: _____

Q2. Languages. Explain why word order matters in translation.

Answer: _____

Answer: _____

Q3. Languages. Use context to guess the meaning of an unknown word.

Answer: _____

Answer: _____

Q4. Languages. Explain how to use pattern spotting in a made-up language.

Answer: _____

Answer: _____

Q5. Languages. Give one example of a false friend and explain the risk.

Answer: _____

Answer: _____

Q6. Languages. Explain why word order matters in translation.

Answer: _____

Answer: _____

Q7. Languages. Use context to guess the meaning of an unknown word.

Answer: _____

Answer: _____

Q8. Languages. Explain how to use pattern spotting in a made-up language.

Answer: _____

Answer: _____

Q9. Languages. Give one example of a false friend and explain the risk.

Answer: _____

Answer: _____

Q10. Languages. Explain why word order matters in translation.

Answer: _____

Answer: _____

Languages Beacon Set 2 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Languages. Use context to guess the meaning of an unknown word.

Answer: _____

Answer: _____

Q2. Languages. Explain how to use pattern spotting in a made-up language.

Answer: _____

Answer: _____

Q3. Languages. Give one example of a false friend and explain the risk.

Answer: _____

Answer: _____

Q4. Languages. Explain why word order matters in translation.

Answer: _____

Answer: _____

Q5. Languages. Use context to guess the meaning of an unknown word.

Answer: _____

Answer: _____

Q6. Languages. Explain how to use pattern spotting in a made-up language.

Answer: _____

Answer: _____

Q7. Languages. Give one example of a false friend and explain the risk.

Answer: _____

Answer: _____

Q8. Languages. Explain why word order matters in translation.

Answer: _____

Answer: _____

Q9. Languages. Use context to guess the meaning of an unknown word.

Answer: _____

Answer: _____

Q10. Languages. Explain how to use pattern spotting in a made-up language.

Answer: _____

Answer: _____

Languages Beacon Set 3 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Languages. Give one example of a false friend and explain the risk.

Answer: _____

Answer: _____

Q2. Languages. Explain why word order matters in translation.

Answer: _____

Answer: _____

Q3. Languages. Use context to guess the meaning of an unknown word.

Answer: _____

Answer: _____

Q4. Languages. Explain how to use pattern spotting in a made-up language.

Answer: _____

Answer: _____

Q5. Languages. Give one example of a false friend and explain the risk.

Answer: _____

Answer: _____

Q6. Languages. Explain why word order matters in translation.

Answer: _____

Answer: _____

Q7. Languages. Use context to guess the meaning of an unknown word.

Answer: _____

Answer: _____

Q8. Languages. Explain how to use pattern spotting in a made-up language.

Answer: _____

Answer: _____

Q9. Languages. Give one example of a false friend and explain the risk.

Answer: _____

Answer: _____

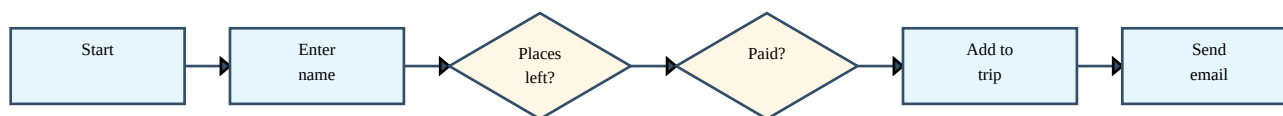
Q10. Languages. Explain why word order matters in translation.

Answer: _____

Answer: _____

Languages Diagram / Visual Challenge 1

Computing stimulus: school trip booking algorithm



NO -> waiting list

NO -> request payment

Possible bug: payment check happens after place check, but not after waiting list update.

Use the visual stimulus above. These questions require interpreting the diagram rather than simply remembering facts.

Q1. Languages. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q2. Languages. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q3. Languages. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q4. Languages. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q5. Languages. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q6. Languages. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

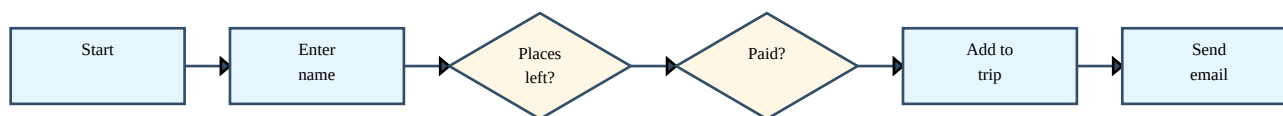
Answer: _____

Answer: _____

Answer: _____

Languages Diagram / Visual Challenge 2

Computing stimulus: school trip booking algorithm



NO -> waiting list

NO -> request payment

Possible bug: payment check happens after place check, but not after waiting list update.

Use the visual stimulus above. These questions require interpreting the diagram rather than simply remembering facts.

Q1. Languages. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q2. Languages. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q3. Languages. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q4. Languages. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q5. Languages. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q6. Languages. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Languages Level 4 Stretch Challenge 1

These are the hardest questions in the chapter. They may combine subject knowledge, interpretation and explanation.

Q1. Languages. What helps most when translating an unknown phrase?

- A. Changing all nouns into verbs
- B. Context clues and word patterns
- C. Guessing the longest word
- D. Ignoring punctuation

Q2. Languages. Explain why word order matters in translation.

Answer: _____

Answer: _____

Q3. Languages. Why are cognates useful but not always safe?

- A. They never help
- B. They are always numbers
- C. They remove grammar
- D. Some similar-looking words can be false friends

Q4. Languages. Explain how to use pattern spotting in a made-up language.

Answer: _____

Answer: _____

Q5. Languages. What helps most when translating an unknown phrase?

- A. Changing all nouns into verbs
- B. Context clues and word patterns
- C. Guessing the longest word
- D. Ignoring punctuation

Q6. Languages. Explain why word order matters in translation.

Answer: _____

Answer: _____

Q7. Languages. Why are cognates useful but not always safe?

- A. They never help
- B. They are always numbers
- C. They remove grammar
- D. Some similar-looking words can be false friends

Q8. Languages. Explain how to use pattern spotting in a made-up language.

Answer: _____

Answer: _____

Languages Level 4 Stretch Challenge 2

These are the hardest questions in the chapter. They may combine subject knowledge, interpretation and explanation.

Q1. Languages. Why are cognates useful but not always safe?

- A. They never help
- B. They are always numbers
- C. They remove grammar
- D. Some similar-looking words can be false friends

Q2. Languages. Explain why word order matters in translation.

Answer: _____

Answer: _____

Q3. Languages. What helps most when translating an unknown phrase?

- A. Changing all nouns into verbs
- B. Context clues and word patterns
- C. Guessing the longest word
- D. Ignoring punctuation

Q4. Languages. Explain how to use pattern spotting in a made-up language.

Answer: _____

Answer: _____

Q5. Languages. Why are cognates useful but not always safe?

- A. They never help
- B. They are always numbers
- C. They remove grammar
- D. Some similar-looking words can be false friends

Q6. Languages. Explain why word order matters in translation.

Answer: _____

Answer: _____

Q7. Languages. What helps most when translating an unknown phrase?

- A. Changing all nouns into verbs
- B. Context clues and word patterns
- C. Guessing the longest word
- D. Ignoring punctuation

Q8. Languages. Explain how to use pattern spotting in a made-up language.

Answer: _____

Answer: _____

Languages Answers and Explanations

Set	Q	Answer	Explanation
A1	1	D	Cognates can mislead if meanings differ.
A1	2	C	Plural forms often change endings/forms.
A1	3	B	Context helps meaning.
A1	4	A	12 = ten + 2; 13 = ten + 3.
A1	5	D	Cognates can mislead if meanings differ.
A1	6	C	Plural forms often change endings/forms.
A1	7	B	Context helps meaning.
A1	8	A	12 = ten + 2; 13 = ten + 3.
A1	9	D	Cognates can mislead if meanings differ.
A1	10	C	Plural forms often change endings/forms.
A1	11	B	Context helps meaning.
A1	12	A	12 = ten + 2; 13 = ten + 3.
A2	1	D	Cognates can mislead if meanings differ.
A2	2	C	Plural forms often change endings/forms.
A2	3	B	Context helps meaning.
A2	4	A	12 = ten + 2; 13 = ten + 3.

Set	Q	Answer	Explanation
A2	5	D	Cognates can mislead if meanings differ.
A2	6	C	Plural forms often change endings/forms.
A2	7	B	Context helps meaning.
A2	8	A	12 = ten + 2; 13 = ten + 3.
A2	9	D	Cognates can mislead if meanings differ.
A2	10	C	Plural forms often change endings/forms.
A2	11	B	Context helps meaning.
A2	12	A	12 = ten + 2; 13 = ten + 3.
A3	1	D	Cognates can mislead if meanings differ.
A3	2	C	Plural forms often change endings/forms.
A3	3	B	Context helps meaning.
A3	4	A	12 = ten + 2; 13 = ten + 3.
A3	5	D	Cognates can mislead if meanings differ.
A3	6	C	Plural forms often change endings/forms.
A3	7	B	Context helps meaning.
A3	8	A	12 = ten + 2; 13 = ten + 3.

Set	Q	Answer	Explanation
A3	9	D	Cognates can mislead if meanings differ.
A3	10	C	Plural forms often change endings/forms.
A3	11	B	Context helps meaning.
A3	12	A	12 = ten + 2; 13 = ten + 3.
A4	1	D	Cognates can mislead if meanings differ.
A4	2	C	Plural forms often change endings/forms.
A4	3	B	Context helps meaning.
A4	4	A	12 = ten + 2; 13 = ten + 3.
A4	5	D	Cognates can mislead if meanings differ.
A4	6	C	Plural forms often change endings/forms.
A4	7	B	Context helps meaning.
A4	8	A	12 = ten + 2; 13 = ten + 3.
A4	9	D	Cognates can mislead if meanings differ.
A4	10	C	Plural forms often change endings/forms.
A4	11	B	Context helps meaning.

Set	Q	Answer	Explanation
A4	12	A	$12 = \text{ten} + 2$; $13 = \text{ten} + 3$.

Beacon answers should be marked for accuracy, vocabulary, reasoning and clarity. Accept any answer that is logically correct and uses the subject concept precisely.

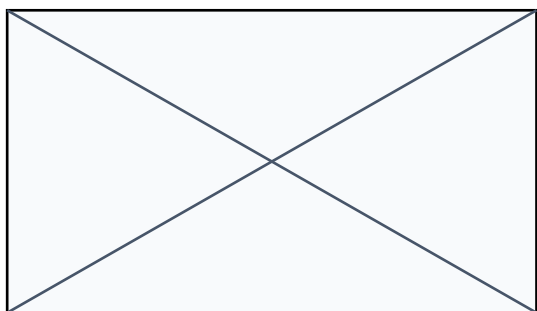
Chapter 8: Art & Design - Hard KS3-Bridge Practice

This chapter trains advanced 11+ thinking in Art & Design. The focus is not simple memory; the questions require interpretation, evidence, diagrams, comparison and precise explanation.

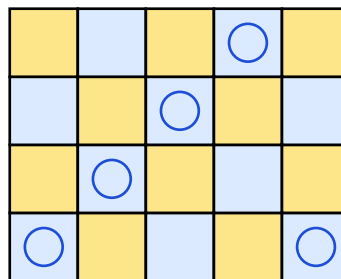
Subject skill map

- Understand and use specialist Art & Design vocabulary precisely.
- Interpret diagrams, charts, tables or visual evidence.
- Eliminate tempting but weaker answer choices.
- Write short answers using exact terminology.
- Explain reasoning clearly under timed conditions.

Art stimulus: composition, pattern, contrast and perspective



one-point perspective



repeated motif pattern

Art & Design Vocabulary Bank - 35 Hard Words

For each word, learn the meaning and how it might be tested in a hard question.

Word	Meaning	How it is tested / used
composition	Key composition concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
foreground	Key foreground concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
background	Key background concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
perspective	Key perspective concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
vanishing point	Key vanishing point concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
contrast	Key contrast concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
tone	Key tone concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
shade	Key shade concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
highlight	Key highlight concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
texture	Key texture concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
pattern	Key pattern concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
motif	Key motif concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
symmetry	Key symmetry concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
asymmetry	Key asymmetry concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
proportion	Key proportion concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
scale	Key scale concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
media	Key media concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
collage	Key collage concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
sculpture	Key sculpture concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
form	Key form concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
line	Key line concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
shape	Key shape concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
colour palette	Key colour palette concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
hue	Key hue concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
primary colour	Key primary colour concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
secondary colour	Key secondary colour concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
warm colour	Key warm colour concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
cool colour	Key cool colour concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
abstract	Key abstract concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
figurative	Key figurative concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
observational drawing	Key observational drawing concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
evaluate	Key evaluate concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
visual balance	Key visual balance concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
focal point	Key focal point concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.
negative space	Key negative space concept used in harder applied questions	Use this term when explaining art & design reasoning, interpreting a diagram, or writing a precise Beacon answer.

Art & Design Vocabulary Application Drill 1

Use the target word accurately in context. Do not write a vague sentence. Your sentence must show the meaning.

1. Target word: composition. Write a precise sentence connected to Art & Design.

Sentence: _____

2. Target word: foreground. Write a precise sentence connected to Art & Design.

Sentence: _____

3. Target word: background. Write a precise sentence connected to Art & Design.

Sentence: _____

4. Target word: perspective. Write a precise sentence connected to Art & Design.

Sentence: _____

5. Target word: vanishing point. Write a precise sentence connected to Art & Design.

Sentence: _____

6. Target word: contrast. Write a precise sentence connected to Art & Design.

Sentence: _____

7. Target word: tone. Write a precise sentence connected to Art & Design.

Sentence: _____

8. Target word: shade. Write a precise sentence connected to Art & Design.

Sentence: _____

9. Target word: highlight. Write a precise sentence connected to Art & Design.

Sentence: _____

10. Target word: texture. Write a precise sentence connected to Art & Design.

Sentence: _____

11. Target word: pattern. Write a precise sentence connected to Art & Design.

Sentence: _____

12. Target word: motif. Write a precise sentence connected to Art & Design.

Sentence: _____

Art & Design Vocabulary Application Drill 2

Use the target word accurately in context. Do not write a vague sentence. Your sentence must show the meaning.

1. Target word: symmetry. Write a precise sentence connected to Art & Design.

Sentence: _____

2. Target word: asymmetry. Write a precise sentence connected to Art & Design.

Sentence: _____

3. Target word: proportion. Write a precise sentence connected to Art & Design.

Sentence: _____

4. Target word: scale. Write a precise sentence connected to Art & Design.

Sentence: _____

5. Target word: media. Write a precise sentence connected to Art & Design.

Sentence: _____

6. Target word: collage. Write a precise sentence connected to Art & Design.

Sentence: _____

7. Target word: sculpture. Write a precise sentence connected to Art & Design.

Sentence: _____

8. Target word: form. Write a precise sentence connected to Art & Design.

Sentence: _____

9. Target word: line. Write a precise sentence connected to Art & Design.

Sentence: _____

10. Target word: shape. Write a precise sentence connected to Art & Design.

Sentence: _____

11. Target word: colour palette. Write a precise sentence connected to Art & Design.

Sentence: _____

12. Target word: hue. Write a precise sentence connected to Art & Design.

Sentence: _____

Art & Design Worked Examples - Hard Reasoning

Worked Example 1. What does one-point perspective mainly create?

- A. Louder sound
- B. Faster running
- C. Electrical flow
- D. Depth and distance

Answer: D. Perspective creates the illusion of depth.

Worked Example 2. A repeated leaf shape across a border is a...

- A. tributary
- B. crotchet
- C. motif/pattern
- D. variable

Answer: C. A motif repeats within a pattern.

Worked Example 3. Why might an artist use asymmetry?

- A. To conduct heat
- B. To create visual interest or tension
- C. To make both sides identical
- D. To measure volume

Answer: B. Asymmetry can feel dynamic.

Worked Example 4. Which design choice makes a warning poster easiest to read?

- A. Strong contrast and clear focal point
- B. Tiny pale text on white
- C. Many overlapping patterns
- D. No hierarchy

Answer: A. Contrast and focal point improve readability.

Art & Design Adventure Set 1 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Art & Design. What does one-point perspective mainly create?

- A. Louder sound
- B. Faster running
- C. Electrical flow
- D. Depth and distance

Q2. Art & Design. A repeated leaf shape across a border is a...

- A. tributary
- B. crotchet
- C. motif/pattern
- D. variable

Q3. Art & Design. Why might an artist use asymmetry?

- A. To conduct heat
- B. To create visual interest or tension
- C. To make both sides identical
- D. To measure volume

Q4. Art & Design. Which design choice makes a warning poster easiest to read?

- A. Strong contrast and clear focal point
- B. Tiny pale text on white
- C. Many overlapping patterns
- D. No hierarchy

Q5. Art & Design. What does one-point perspective mainly create?

- A. Louder sound
- B. Faster running
- C. Electrical flow
- D. Depth and distance

Q6. Art & Design. A repeated leaf shape across a border is a...

- A. tributary
- B. crotchet
- C. motif/pattern
- D. variable

Q7. Art & Design. Why might an artist use asymmetry?

- A. To conduct heat
- B. To create visual interest or tension
- C. To make both sides identical
- D. To measure volume

Q8. Art & Design. Which design choice makes a warning poster easiest to read?

- A. Strong contrast and clear focal point
- B. Tiny pale text on white
- C. Many overlapping patterns
- D. No hierarchy

Q9. Art & Design. What does one-point perspective mainly create?

- A. Louder sound
- B. Faster running
- C. Electrical flow
- D. Depth and distance

Q10. Art & Design. A repeated leaf shape across a border is a...

- A. tributary
- B. crotchet
- C. motif/pattern
- D. variable

Q11. Art & Design. Why might an artist use asymmetry?

- A. To conduct heat
- B. To create visual interest or tension
- C. To make both sides identical
- D. To measure volume

Q12. Art & Design. Which design choice makes a warning poster easiest to read?

- A. Strong contrast and clear focal point
- B. Tiny pale text on white
- C. Many overlapping patterns
- D. No hierarchy

Art & Design Adventure Set 2 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Art & Design. What does one-point perspective mainly create?

- A. Louder sound
- B. Faster running
- C. Electrical flow
- D. Depth and distance

Q2. Art & Design. A repeated leaf shape across a border is a...

- A. tributary
- B. crotchet
- C. motif/pattern
- D. variable

Q3. Art & Design. Why might an artist use asymmetry?

- A. To conduct heat
- B. To create visual interest or tension
- C. To make both sides identical
- D. To measure volume

Q4. Art & Design. Which design choice makes a warning poster easiest to read?

- A. Strong contrast and clear focal point
- B. Tiny pale text on white
- C. Many overlapping patterns
- D. No hierarchy

Q5. Art & Design. What does one-point perspective mainly create?

- A. Louder sound
- B. Faster running
- C. Electrical flow
- D. Depth and distance

Q6. Art & Design. A repeated leaf shape across a border is a...

- A. tributary
- B. crotchet
- C. motif/pattern
- D. variable

Q7. Art & Design. Why might an artist use asymmetry?

- A. To conduct heat
- B. To create visual interest or tension
- C. To make both sides identical
- D. To measure volume

Q8. Art & Design. Which design choice makes a warning poster easiest to read?

- A. Strong contrast and clear focal point
- B. Tiny pale text on white
- C. Many overlapping patterns
- D. No hierarchy

Q9. Art & Design. What does one-point perspective mainly create?

- A. Louder sound
- B. Faster running
- C. Electrical flow
- D. Depth and distance

Q10. Art & Design. A repeated leaf shape across a border is a...

- A. tributary
- B. crotchet
- C. motif/pattern
- D. variable

Q11. Art & Design. Why might an artist use asymmetry?

- A. To conduct heat
- B. To create visual interest or tension
- C. To make both sides identical
- D. To measure volume

Q12. Art & Design. Which design choice makes a warning poster easiest to read?

- A. Strong contrast and clear focal point
- B. Tiny pale text on white
- C. Many overlapping patterns
- D. No hierarchy

Art & Design Adventure Set 3 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Art & Design. What does one-point perspective mainly create?

- A. Louder sound
- B. Faster running
- C. Electrical flow
- D. Depth and distance

Q2. Art & Design. A repeated leaf shape across a border is a...

- A. tributary
- B. crotchet
- C. motif/pattern
- D. variable

Q3. Art & Design. Why might an artist use asymmetry?

- A. To conduct heat
- B. To create visual interest or tension
- C. To make both sides identical
- D. To measure volume

Q4. Art & Design. Which design choice makes a warning poster easiest to read?

- A. Strong contrast and clear focal point
- B. Tiny pale text on white
- C. Many overlapping patterns
- D. No hierarchy

Q5. Art & Design. What does one-point perspective mainly create?

- A. Louder sound
- B. Faster running
- C. Electrical flow
- D. Depth and distance

Q6. Art & Design. A repeated leaf shape across a border is a...

- A. tributary
- B. crotchet
- C. motif/pattern
- D. variable

Q7. Art & Design. Why might an artist use asymmetry?

- A. To conduct heat
- B. To create visual interest or tension
- C. To make both sides identical
- D. To measure volume

Q8. Art & Design. Which design choice makes a warning poster easiest to read?

- A. Strong contrast and clear focal point
- B. Tiny pale text on white
- C. Many overlapping patterns
- D. No hierarchy

Q9. Art & Design. What does one-point perspective mainly create?

- A. Louder sound
- B. Faster running
- C. Electrical flow
- D. Depth and distance

Q10. Art & Design. A repeated leaf shape across a border is a...

- A. tributary
- B. crotchet
- C. motif/pattern
- D. variable

Q11. Art & Design. Why might an artist use asymmetry?

- A. To conduct heat
- B. To create visual interest or tension
- C. To make both sides identical
- D. To measure volume

Q12. Art & Design. Which design choice makes a warning poster easiest to read?

- A. Strong contrast and clear focal point
- B. Tiny pale text on white
- C. Many overlapping patterns
- D. No hierarchy

Art & Design Adventure Set 4 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Art & Design. What does one-point perspective mainly create?

- A. Louder sound
- B. Faster running
- C. Electrical flow
- D. Depth and distance

Q2. Art & Design. A repeated leaf shape across a border is a...

- A. tributary
- B. crotchet
- C. motif/pattern
- D. variable

Q3. Art & Design. Why might an artist use asymmetry?

- A. To conduct heat
- B. To create visual interest or tension
- C. To make both sides identical
- D. To measure volume

Q4. Art & Design. Which design choice makes a warning poster easiest to read?

- A. Strong contrast and clear focal point
- B. Tiny pale text on white
- C. Many overlapping patterns
- D. No hierarchy

Q5. Art & Design. What does one-point perspective mainly create?

- A. Louder sound
- B. Faster running
- C. Electrical flow
- D. Depth and distance

Q6. Art & Design. A repeated leaf shape across a border is a...

- A. tributary
- B. crotchet
- C. motif/pattern
- D. variable

Q7. Art & Design. Why might an artist use asymmetry?

- A. To conduct heat
- B. To create visual interest or tension
- C. To make both sides identical
- D. To measure volume

Q8. Art & Design. Which design choice makes a warning poster easiest to read?

- A. Strong contrast and clear focal point
- B. Tiny pale text on white
- C. Many overlapping patterns
- D. No hierarchy

Q9. Art & Design. What does one-point perspective mainly create?

- A. Louder sound
- B. Faster running
- C. Electrical flow
- D. Depth and distance

Q10. Art & Design. A repeated leaf shape across a border is a...

- A. tributary
- B. crotchet
- C. motif/pattern
- D. variable

Q11. Art & Design. Why might an artist use asymmetry?

- A. To conduct heat
- B. To create visual interest or tension
- C. To make both sides identical
- D. To measure volume

Q12. Art & Design. Which design choice makes a warning poster easiest to read?

- A. Strong contrast and clear focal point
- B. Tiny pale text on white
- C. Many overlapping patterns
- D. No hierarchy

Art & Design Beacon Set 1 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Art & Design. Describe how perspective creates depth.

Answer: _____

Answer: _____

Q2. Art & Design. Explain the difference between abstract and figurative art.

Answer: _____

Answer: _____

Q3. Art & Design. Evaluate a pattern using symmetry, motif and colour.

Answer: _____

Answer: _____

Q4. Art & Design. Explain how contrast improves a poster.

Answer: _____

Answer: _____

Q5. Art & Design. Describe how perspective creates depth.

Answer: _____

Answer: _____

Q6. Art & Design. Explain the difference between abstract and figurative art.

Answer: _____

Answer: _____

Q7. Art & Design. Evaluate a pattern using symmetry, motif and colour.

Answer: _____

Answer: _____

Q8. Art & Design. Explain how contrast improves a poster.

Answer: _____

Answer: _____

Q9. Art & Design. Describe how perspective creates depth.

Answer: _____

Answer: _____

Q10. Art & Design. Explain the difference between abstract and figurative art.

Answer: _____

Answer: _____

Art & Design Beacon Set 2 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Art & Design. Evaluate a pattern using symmetry, motif and colour.

Answer: _____

Answer: _____

Q2. Art & Design. Explain how contrast improves a poster.

Answer: _____

Answer: _____

Q3. Art & Design. Describe how perspective creates depth.

Answer: _____

Answer: _____

Q4. Art & Design. Explain the difference between abstract and figurative art.

Answer: _____

Answer: _____

Q5. Art & Design. Evaluate a pattern using symmetry, motif and colour.

Answer: _____

Answer: _____

Q6. Art & Design. Explain how contrast improves a poster.

Answer: _____

Answer: _____

Q7. Art & Design. Describe how perspective creates depth.

Answer: _____

Answer: _____

Q8. Art & Design. Explain the difference between abstract and figurative art.

Answer: _____

Answer: _____

Q9. Art & Design. Evaluate a pattern using symmetry, motif and colour.

Answer: _____

Answer: _____

Q10. Art & Design. Explain how contrast improves a poster.

Answer: _____

Answer: _____

Art & Design Beacon Set 3 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Art & Design. Describe how perspective creates depth.

Answer: _____

Answer: _____

Q2. Art & Design. Explain the difference between abstract and figurative art.

Answer: _____

Answer: _____

Q3. Art & Design. Evaluate a pattern using symmetry, motif and colour.

Answer: _____

Answer: _____

Q4. Art & Design. Explain how contrast improves a poster.

Answer: _____

Answer: _____

Q5. Art & Design. Describe how perspective creates depth.

Answer: _____

Answer: _____

Q6. Art & Design. Explain the difference between abstract and figurative art.

Answer: _____

Answer: _____

Q7. Art & Design. Evaluate a pattern using symmetry, motif and colour.

Answer: _____

Answer: _____

Q8. Art & Design. Explain how contrast improves a poster.

Answer: _____

Answer: _____

Q9. Art & Design. Describe how perspective creates depth.

Answer: _____

Answer: _____

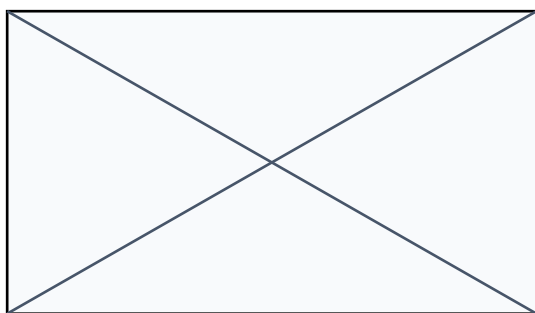
Q10. Art & Design. Explain the difference between abstract and figurative art.

Answer: _____

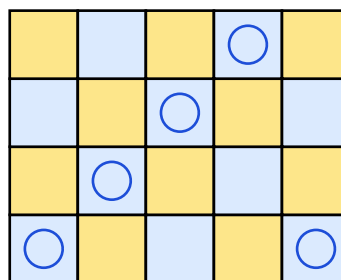
Answer: _____

Art & Design Diagram / Visual Challenge 1

Art stimulus: composition, pattern, contrast and perspective



one-point perspective



repeated motif pattern

Use the visual stimulus above. These questions require interpreting the diagram rather than simply remembering facts.

Q1. Art & Design. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q2. Art & Design. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q3. Art & Design. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q4. Art & Design. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q5. Art & Design. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q6. Art & Design. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

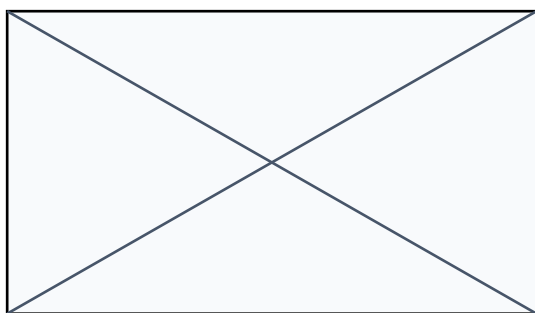
Answer: _____

Answer: _____

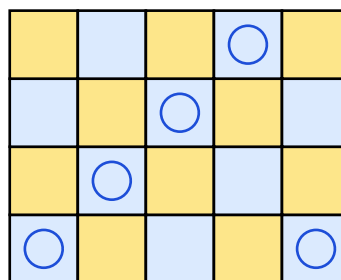
Answer: _____

Art & Design Diagram / Visual Challenge 2

Art stimulus: composition, pattern, contrast and perspective



one-point perspective



repeated motif pattern

Use the visual stimulus above. These questions require interpreting the diagram rather than simply remembering facts.

Q1. Art & Design. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q2. Art & Design. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q3. Art & Design. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q4. Art & Design. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q5. Art & Design. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q6. Art & Design. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Art & Design Level 4 Stretch Challenge 1

These are the hardest questions in the chapter. They may combine subject knowledge, interpretation and explanation.

Q1. Art & Design. Why might an artist use asymmetry?

- A. To conduct heat
- B. To create visual interest or tension
- C. To make both sides identical
- D. To measure volume

Q2. Art & Design. Explain the difference between abstract and figurative art.

Answer: _____

Answer: _____

Q3. Art & Design. What does one-point perspective mainly create?

- A. Louder sound
- B. Faster running
- C. Electrical flow
- D. Depth and distance

Q4. Art & Design. Explain how contrast improves a poster.

Answer: _____

Answer: _____

Q5. Art & Design. Why might an artist use asymmetry?

- A. To conduct heat
- B. To create visual interest or tension
- C. To make both sides identical
- D. To measure volume

Q6. Art & Design. Explain the difference between abstract and figurative art.

Answer: _____

Answer: _____

Q7. Art & Design. What does one-point perspective mainly create?

- A. Louder sound
- B. Faster running
- C. Electrical flow
- D. Depth and distance

Q8. Art & Design. Explain how contrast improves a poster.

Answer: _____

Answer: _____

Art & Design Level 4 Stretch Challenge 2

These are the hardest questions in the chapter. They may combine subject knowledge, interpretation and explanation.

Q1. Art & Design. What does one-point perspective mainly create?

- A. Louder sound
- B. Faster running
- C. Electrical flow
- D. Depth and distance

Q2. Art & Design. Explain the difference between abstract and figurative art.

Answer: _____

Answer: _____

Q3. Art & Design. Why might an artist use asymmetry?

- A. To conduct heat
- B. To create visual interest or tension
- C. To make both sides identical
- D. To measure volume

Q4. Art & Design. Explain how contrast improves a poster.

Answer: _____

Answer: _____

Q5. Art & Design. What does one-point perspective mainly create?

- A. Louder sound
- B. Faster running
- C. Electrical flow
- D. Depth and distance

Q6. Art & Design. Explain the difference between abstract and figurative art.

Answer: _____

Answer: _____

Q7. Art & Design. Why might an artist use asymmetry?

- A. To conduct heat
- B. To create visual interest or tension
- C. To make both sides identical
- D. To measure volume

Q8. Art & Design. Explain how contrast improves a poster.

Answer: _____

Answer: _____

Art & Design Answers and Explanations

Set	Q	Answer	Explanation
A1	1	D	Perspective creates the illusion of depth.
A1	2	C	A motif repeats within a pattern.
A1	3	B	Asymmetry can feel dynamic.
A1	4	A	Contrast and focal point improve readability.
A1	5	D	Perspective creates the illusion of depth.
A1	6	C	A motif repeats within a pattern.
A1	7	B	Asymmetry can feel dynamic.
A1	8	A	Contrast and focal point improve readability.
A1	9	D	Perspective creates the illusion of depth.
A1	10	C	A motif repeats within a pattern.
A1	11	B	Asymmetry can feel dynamic.
A1	12	A	Contrast and focal point improve readability.
A2	1	D	Perspective creates the illusion of depth.
A2	2	C	A motif repeats within a pattern.
A2	3	B	Asymmetry can feel dynamic.
A2	4	A	Contrast and focal point improve readability.
Set	Q	Answer	Explanation
A2	5	D	Perspective creates the illusion of depth.
A2	6	C	A motif repeats within a pattern.
A2	7	B	Asymmetry can feel dynamic.
A2	8	A	Contrast and focal point improve readability.
A2	9	D	Perspective creates the illusion of depth.
A2	10	C	A motif repeats within a pattern.
A2	11	B	Asymmetry can feel dynamic.
A2	12	A	Contrast and focal point improve readability.
A3	1	D	Perspective creates the illusion of depth.
A3	2	C	A motif repeats within a pattern.
A3	3	B	Asymmetry can feel dynamic.
A3	4	A	Contrast and focal point improve readability.
A3	5	D	Perspective creates the illusion of depth.
A3	6	C	A motif repeats within a pattern.
A3	7	B	Asymmetry can feel dynamic.
A3	8	A	Contrast and focal point improve readability.
Set	Q	Answer	Explanation
A3	9	D	Perspective creates the illusion of depth.
A3	10	C	A motif repeats within a pattern.
A3	11	B	Asymmetry can feel dynamic.
A3	12	A	Contrast and focal point improve readability.
A4	1	D	Perspective creates the illusion of depth.
A4	2	C	A motif repeats within a pattern.
A4	3	B	Asymmetry can feel dynamic.
A4	4	A	Contrast and focal point improve readability.
A4	5	D	Perspective creates the illusion of depth.
A4	6	C	A motif repeats within a pattern.
A4	7	B	Asymmetry can feel dynamic.
A4	8	A	Contrast and focal point improve readability.
A4	9	D	Perspective creates the illusion of depth.
A4	10	C	A motif repeats within a pattern.
A4	11	B	Asymmetry can feel dynamic.

Set	Q	Answer	Explanation
A4	12	A	Contrast and focal point improve readability.

Beacon answers should be marked for accuracy, vocabulary, reasoning and clarity. Accept any answer that is logically correct and uses the subject concept precisely.

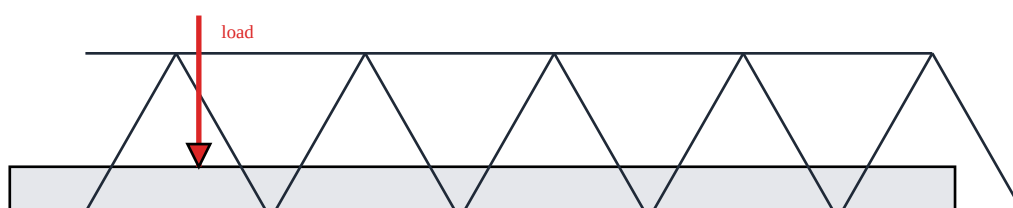
Chapter 9: Design & Technology - Hard KS3-Bridge Practice

This chapter trains advanced 11+ thinking in Design & Technology. The focus is not simple memory; the questions require interpretation, evidence, diagrams, comparison and precise explanation.

Subject skill map

- Understand and use specialist Design & Technology vocabulary precisely.
- Interpret diagrams, charts, tables or visual evidence.
- Eliminate tempting but weaker answer choices.
- Write short answers using exact terminology.
- Explain reasoning clearly under timed conditions.

D&T stimulus: bridge prototype with forces and supports



triangular truss supports increase strength and stability

Design & Technology Vocabulary Bank - 35 Hard Words

For each word, learn the meaning and how it might be tested in a hard question.

Word	Meaning	How it is tested / used
prototype	Key prototype concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
design brief	Key design brief concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
specification	Key specification concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
criteria	Key criteria concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
constraint	Key constraint concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
function	Key function concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
aesthetics	Key aesthetics concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
Word	Meaning	How it is tested / used
ergonomic	Key ergonomic concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
user need	Key user need concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
material property	Key material property concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
durable	Key durable concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
flexible	Key flexible concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
waterproof	Key waterproof concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
stable	Key stable concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
Word	Meaning	How it is tested / used
reinforce	Key reinforce concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
triangulation	using triangles to strengthen structures	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
mechanism	Key mechanism concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
lever	Key lever concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
pivot	Key pivot concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
axle	Key axle concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
pulley	Key pulley concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
Word	Meaning	How it is tested / used
gear	Key gear concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
cam	Key cam concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
template	Key template concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
component	Key component concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
join	Key join concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
adhesive	Key adhesive concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
modify	Key modify concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
Word	Meaning	How it is tested / used
evaluate	Key evaluate concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
sustainable	Key sustainable concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
innovation	Key innovation concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
load	Key load concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
compression	Key compression concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
tension	Key tension concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.
testing	Key testing concept used in harder applied questions	Use this term when explaining design & technology reasoning, interpreting a diagram, or writing a precise Beacon answer.

Design & Technology Vocabulary Application Drill 1

Use the target word accurately in context. Do not write a vague sentence. Your sentence must show the meaning.

1. Target word: prototype. Write a precise sentence connected to Design & Technology.

Sentence: _____

2. Target word: design brief. Write a precise sentence connected to Design & Technology.

Sentence: _____

3. Target word: specification. Write a precise sentence connected to Design & Technology.

Sentence: _____

4. Target word: criteria. Write a precise sentence connected to Design & Technology.

Sentence: _____

5. Target word: constraint. Write a precise sentence connected to Design & Technology.

Sentence: _____

6. Target word: function. Write a precise sentence connected to Design & Technology.

Sentence: _____

7. Target word: aesthetics. Write a precise sentence connected to Design & Technology.

Sentence: _____

8. Target word: ergonomic. Write a precise sentence connected to Design & Technology.

Sentence: _____

9. Target word: user need. Write a precise sentence connected to Design & Technology.

Sentence: _____

10. Target word: material property. Write a precise sentence connected to Design & Technology.

Sentence: _____

11. Target word: durable. Write a precise sentence connected to Design & Technology.

Sentence: _____

12. Target word: flexible. Write a precise sentence connected to Design & Technology.

Sentence: _____

Design & Technology Vocabulary Application Drill 2

Use the target word accurately in context. Do not write a vague sentence. Your sentence must show the meaning.

1. Target word: waterproof. Write a precise sentence connected to Design & Technology.

Sentence: _____

2. Target word: stable. Write a precise sentence connected to Design & Technology.

Sentence: _____

3. Target word: reinforce. Write a precise sentence connected to Design & Technology.

Sentence: _____

4. Target word: triangulation. Write a precise sentence connected to Design & Technology.

Sentence: _____

5. Target word: mechanism. Write a precise sentence connected to Design & Technology.

Sentence: _____

6. Target word: lever. Write a precise sentence connected to Design & Technology.

Sentence: _____

7. Target word: pivot. Write a precise sentence connected to Design & Technology.

Sentence: _____

8. Target word: axle. Write a precise sentence connected to Design & Technology.

Sentence: _____

9. Target word: pulley. Write a precise sentence connected to Design & Technology.

Sentence: _____

10. Target word: gear. Write a precise sentence connected to Design & Technology.

Sentence: _____

11. Target word: cam. Write a precise sentence connected to Design & Technology.

Sentence: _____

12. Target word: template. Write a precise sentence connected to Design & Technology.

Sentence: _____

Design & Technology Worked Examples - Hard Reasoning

Worked Example 1. Which is a design criterion for a school water bottle?

- A. It should be mysterious
- B. It must play music
- C. It should be historically reliable
- D. It must not leak when carried in a bag

Answer: D. A criterion states a measurable requirement.

Worked Example 2. Why test a prototype with the intended user?

- A. To change the subject
- B. To make the prototype official
- C. To check if it meets real user needs
- D. To avoid evaluation

Answer: C. User testing gives relevant feedback.

Worked Example 3. What is the difference between aesthetics and function?

- A. Aesthetics means strength only
- B. Aesthetics is appearance; function is what it does
- C. Both mean colour only
- D. Function means history

Answer: B. Design must consider both look and purpose.

Worked Example 4. A bridge prototype bends under load. Which improvement is most structural?

- A. Add triangular bracing
- B. Change the colour
- C. Make the label bigger
- D. Remove testing

Answer: A. Triangulation strengthens structures.

Design & Technology Adventure Set 1 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Design & Technology. Which is a design criterion for a school water bottle?

- A. It should be mysterious
- B. It must play music
- C. It should be historically reliable
- D. It must not leak when carried in a bag

Q2. Design & Technology. Why test a prototype with the intended user?

- A. To change the subject
- B. To make the prototype official
- C. To check if it meets real user needs
- D. To avoid evaluation

Q3. Design & Technology. What is the difference between aesthetics and function?

- A. Aesthetics means strength only
- B. Aesthetics is appearance; function is what it does
- C. Both mean colour only
- D. Function means history

Q4. Design & Technology. A bridge prototype bends under load. Which improvement is most structural?

- A. Add triangular bracing
- B. Change the colour
- C. Make the label bigger
- D. Remove testing

Q5. Design & Technology. Which is a design criterion for a school water bottle?

- A. It should be mysterious
- B. It must play music
- C. It should be historically reliable
- D. It must not leak when carried in a bag

Q6. Design & Technology. Why test a prototype with the intended user?

- A. To change the subject
- B. To make the prototype official
- C. To check if it meets real user needs
- D. To avoid evaluation

Q7. Design & Technology. What is the difference between aesthetics and function?

- A. Aesthetics means strength only
- B. Aesthetics is appearance; function is what it does
- C. Both mean colour only
- D. Function means history

Q8. Design & Technology. A bridge prototype bends under load. Which improvement is most structural?

- A. Add triangular bracing
- B. Change the colour
- C. Make the label bigger
- D. Remove testing

Q9. Design & Technology. Which is a design criterion for a school water bottle?

- A. It should be mysterious
- B. It must play music
- C. It should be historically reliable
- D. It must not leak when carried in a bag

Q10. Design & Technology. Why test a prototype with the intended user?

- A. To change the subject
- B. To make the prototype official
- C. To check if it meets real user needs
- D. To avoid evaluation

Q11. Design & Technology. What is the difference between aesthetics and function?

- A. Aesthetics means strength only
- B. Aesthetics is appearance; function is what it does
- C. Both mean colour only
- D. Function means history

Q12. Design & Technology. A bridge prototype bends under load. Which improvement is most structural?

- A. Add triangular bracing
- B. Change the colour
- C. Make the label bigger
- D. Remove testing

Design & Technology Adventure Set 2 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Design & Technology. Which is a design criterion for a school water bottle?

- A. It should be mysterious
- B. It must play music
- C. It should be historically reliable
- D. It must not leak when carried in a bag

Q2. Design & Technology. Why test a prototype with the intended user?

- A. To change the subject
- B. To make the prototype official
- C. To check if it meets real user needs
- D. To avoid evaluation

Q3. Design & Technology. What is the difference between aesthetics and function?

- A. Aesthetics means strength only
- B. Aesthetics is appearance; function is what it does
- C. Both mean colour only
- D. Function means history

Q4. Design & Technology. A bridge prototype bends under load. Which improvement is most structural?

- A. Add triangular bracing
- B. Change the colour
- C. Make the label bigger
- D. Remove testing

Q5. Design & Technology. Which is a design criterion for a school water bottle?

- A. It should be mysterious
- B. It must play music
- C. It should be historically reliable
- D. It must not leak when carried in a bag

Q6. Design & Technology. Why test a prototype with the intended user?

- A. To change the subject
- B. To make the prototype official
- C. To check if it meets real user needs
- D. To avoid evaluation

Q7. Design & Technology. What is the difference between aesthetics and function?

- A. Aesthetics means strength only
- B. Aesthetics is appearance; function is what it does
- C. Both mean colour only
- D. Function means history

Q8. Design & Technology. A bridge prototype bends under load. Which improvement is most structural?

- A. Add triangular bracing
- B. Change the colour
- C. Make the label bigger
- D. Remove testing

Q9. Design & Technology. Which is a design criterion for a school water bottle?

- A. It should be mysterious
- B. It must play music
- C. It should be historically reliable
- D. It must not leak when carried in a bag

Q10. Design & Technology. Why test a prototype with the intended user?

- A. To change the subject
- B. To make the prototype official
- C. To check if it meets real user needs
- D. To avoid evaluation

Q11. Design & Technology. What is the difference between aesthetics and function?

- A. Aesthetics means strength only
- B. Aesthetics is appearance; function is what it does
- C. Both mean colour only
- D. Function means history

Q12. Design & Technology. A bridge prototype bends under load. Which improvement is most structural?

- A. Add triangular bracing
- B. Change the colour
- C. Make the label bigger
- D. Remove testing

Design & Technology Adventure Set 3 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Design & Technology. Which is a design criterion for a school water bottle?

- A. It should be mysterious
- B. It must play music
- C. It should be historically reliable
- D. It must not leak when carried in a bag

Q2. Design & Technology. Why test a prototype with the intended user?

- A. To change the subject
- B. To make the prototype official
- C. To check if it meets real user needs
- D. To avoid evaluation

Q3. Design & Technology. What is the difference between aesthetics and function?

- A. Aesthetics means strength only
- B. Aesthetics is appearance; function is what it does
- C. Both mean colour only
- D. Function means history

Q4. Design & Technology. A bridge prototype bends under load. Which improvement is most structural?

- A. Add triangular bracing
- B. Change the colour
- C. Make the label bigger
- D. Remove testing

Q5. Design & Technology. Which is a design criterion for a school water bottle?

- A. It should be mysterious
- B. It must play music
- C. It should be historically reliable
- D. It must not leak when carried in a bag

Q6. Design & Technology. Why test a prototype with the intended user?

- A. To change the subject
- B. To make the prototype official
- C. To check if it meets real user needs
- D. To avoid evaluation

Q7. Design & Technology. What is the difference between aesthetics and function?

- A. Aesthetics means strength only
- B. Aesthetics is appearance; function is what it does
- C. Both mean colour only
- D. Function means history

Q8. Design & Technology. A bridge prototype bends under load. Which improvement is most structural?

- A. Add triangular bracing
- B. Change the colour
- C. Make the label bigger
- D. Remove testing

Q9. Design & Technology. Which is a design criterion for a school water bottle?

- A. It should be mysterious
- B. It must play music
- C. It should be historically reliable
- D. It must not leak when carried in a bag

Q10. Design & Technology. Why test a prototype with the intended user?

- A. To change the subject
- B. To make the prototype official
- C. To check if it meets real user needs
- D. To avoid evaluation

Q11. Design & Technology. What is the difference between aesthetics and function?

- A. Aesthetics means strength only
- B. Aesthetics is appearance; function is what it does
- C. Both mean colour only
- D. Function means history

Q12. Design & Technology. A bridge prototype bends under load. Which improvement is most structural?

- A. Add triangular bracing
- B. Change the colour
- C. Make the label bigger
- D. Remove testing

Design & Technology Adventure Set 4 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Design & Technology. Which is a design criterion for a school water bottle?

- A. It should be mysterious
- B. It must play music
- C. It should be historically reliable
- D. It must not leak when carried in a bag

Q2. Design & Technology. Why test a prototype with the intended user?

- A. To change the subject
- B. To make the prototype official
- C. To check if it meets real user needs
- D. To avoid evaluation

Q3. Design & Technology. What is the difference between aesthetics and function?

- A. Aesthetics means strength only
- B. Aesthetics is appearance; function is what it does
- C. Both mean colour only
- D. Function means history

Q4. Design & Technology. A bridge prototype bends under load. Which improvement is most structural?

- A. Add triangular bracing
- B. Change the colour
- C. Make the label bigger
- D. Remove testing

Q5. Design & Technology. Which is a design criterion for a school water bottle?

- A. It should be mysterious
- B. It must play music
- C. It should be historically reliable
- D. It must not leak when carried in a bag

Q6. Design & Technology. Why test a prototype with the intended user?

- A. To change the subject
- B. To make the prototype official
- C. To check if it meets real user needs
- D. To avoid evaluation

Q7. Design & Technology. What is the difference between aesthetics and function?

- A. Aesthetics means strength only
- B. Aesthetics is appearance; function is what it does
- C. Both mean colour only
- D. Function means history

Q8. Design & Technology. A bridge prototype bends under load. Which improvement is most structural?

- A. Add triangular bracing
- B. Change the colour
- C. Make the label bigger
- D. Remove testing

Q9. Design & Technology. Which is a design criterion for a school water bottle?

- A. It should be mysterious
- B. It must play music
- C. It should be historically reliable
- D. It must not leak when carried in a bag

Q10. Design & Technology. Why test a prototype with the intended user?

- A. To change the subject
- B. To make the prototype official
- C. To check if it meets real user needs
- D. To avoid evaluation

Q11. Design & Technology. What is the difference between aesthetics and function?

- A. Aesthetics means strength only
- B. Aesthetics is appearance; function is what it does
- C. Both mean colour only
- D. Function means history

Q12. Design & Technology. A bridge prototype bends under load. Which improvement is most structural?

- A. Add triangular bracing
- B. Change the colour
- C. Make the label bigger
- D. Remove testing

Design & Technology Beacon Set 1 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Design & Technology. Write three design criteria for a reusable lunchbox.

Answer: _____

Answer: _____

Q2. Design & Technology. Describe one user need and one material property for a phone stand.

Answer: _____

Answer: _____

Q3. Design & Technology. Explain how testing changes a prototype.

Answer: _____

Answer: _____

Q4. Design & Technology. Explain how triangular supports strengthen a structure.

Answer: _____

Answer: _____

Q5. Design & Technology. Write three design criteria for a reusable lunchbox.

Answer: _____

Answer: _____

Q6. Design & Technology. Describe one user need and one material property for a phone stand.

Answer: _____

Answer: _____

Q7. Design & Technology. Explain how testing changes a prototype.

Answer: _____

Answer: _____

Q8. Design & Technology. Explain how triangular supports strengthen a structure.

Answer: _____

Answer: _____

Q9. Design & Technology. Write three design criteria for a reusable lunchbox.

Answer: _____

Answer: _____

Q10. Design & Technology. Describe one user need and one material property for a phone stand.

Answer: _____

Answer: _____

Design & Technology Beacon Set 2 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Design & Technology. Explain how testing changes a prototype.

Answer: _____

Answer: _____

Q2. Design & Technology. Explain how triangular supports strengthen a structure.

Answer: _____

Answer: _____

Q3. Design & Technology. Write three design criteria for a reusable lunchbox.

Answer: _____

Answer: _____

Q4. Design & Technology. Describe one user need and one material property for a phone stand.

Answer: _____

Answer: _____

Q5. Design & Technology. Explain how testing changes a prototype.

Answer: _____

Answer: _____

Q6. Design & Technology. Explain how triangular supports strengthen a structure.

Answer: _____

Answer: _____

Q7. Design & Technology. Write three design criteria for a reusable lunchbox.

Answer: _____

Answer: _____

Q8. Design & Technology. Describe one user need and one material property for a phone stand.

Answer: _____

Answer: _____

Q9. Design & Technology. Explain how testing changes a prototype.

Answer: _____

Answer: _____

Q10. Design & Technology. Explain how triangular supports strengthen a structure.

Answer: _____

Answer: _____

Design & Technology Beacon Set 3 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Design & Technology. Write three design criteria for a reusable lunchbox.

Answer: _____

Answer: _____

Q2. Design & Technology. Describe one user need and one material property for a phone stand.

Answer: _____

Answer: _____

Q3. Design & Technology. Explain how testing changes a prototype.

Answer: _____

Answer: _____

Q4. Design & Technology. Explain how triangular supports strengthen a structure.

Answer: _____

Answer: _____

Q5. Design & Technology. Write three design criteria for a reusable lunchbox.

Answer: _____

Answer: _____

Q6. Design & Technology. Describe one user need and one material property for a phone stand.

Answer: _____

Answer: _____

Q7. Design & Technology. Explain how testing changes a prototype.

Answer: _____

Answer: _____

Q8. Design & Technology. Explain how triangular supports strengthen a structure.

Answer: _____

Answer: _____

Q9. Design & Technology. Write three design criteria for a reusable lunchbox.

Answer: _____

Answer: _____

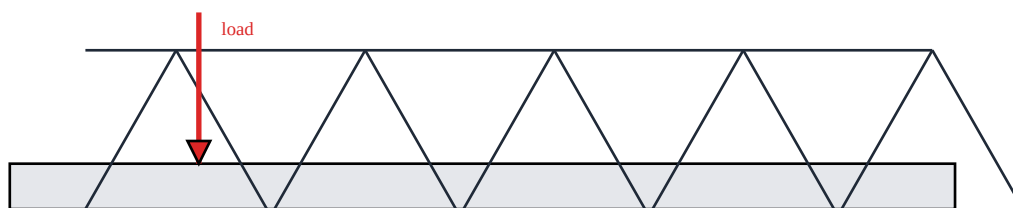
Q10. Design & Technology. Describe one user need and one material property for a phone stand.

Answer: _____

Answer: _____

Design & Technology Diagram / Visual Challenge 1

D&T stimulus: bridge prototype with forces and supports



triangular truss supports increase strength and stability

Use the visual stimulus above. These questions require interpreting the diagram rather than simply remembering facts.

Q1. Design & Technology. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q2. Design & Technology. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q3. Design & Technology. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q4. Design & Technology. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q5. Design & Technology. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q6. Design & Technology. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

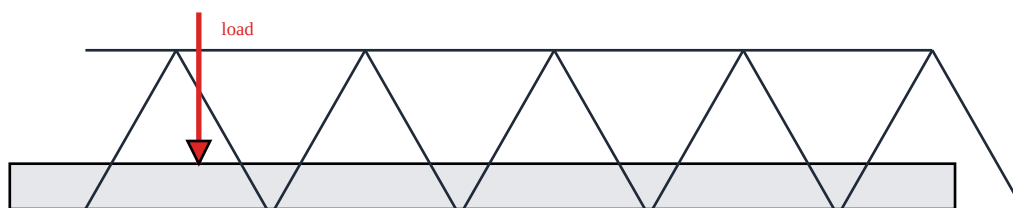
Answer: _____

Answer: _____

Answer: _____

Design & Technology Diagram / Visual Challenge 2

D&T stimulus: bridge prototype with forces and supports



triangular truss supports increase strength and stability

Use the visual stimulus above. These questions require interpreting the diagram rather than simply remembering facts.

Q1. Design & Technology. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q2. Design & Technology. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q3. Design & Technology. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q4. Design & Technology. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q5. Design & Technology. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q6. Design & Technology. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Design & Technology Level 4 Stretch Challenge 1

These are the hardest questions in the chapter. They may combine subject knowledge, interpretation and explanation.

Q1. Design & Technology. What is the difference between aesthetics and function?

- A. Aesthetics means strength only
- B. Aesthetics is appearance; function is what it does
- C. Both mean colour only
- D. Function means history

Q2. Design & Technology. Describe one user need and one material property for a phone stand.

Answer: _____

Answer: _____

Q3. Design & Technology. Which is a design criterion for a school water bottle?

- A. It should be mysterious
- B. It must play music
- C. It should be historically reliable
- D. It must not leak when carried in a bag

Q4. Design & Technology. Explain how triangular supports strengthen a structure.

Answer: _____

Answer: _____

Q5. Design & Technology. What is the difference between aesthetics and function?

- A. Aesthetics means strength only
- B. Aesthetics is appearance; function is what it does
- C. Both mean colour only
- D. Function means history

Q6. Design & Technology. Describe one user need and one material property for a phone stand.

Answer: _____

Answer: _____

Q7. Design & Technology. Which is a design criterion for a school water bottle?

- A. It should be mysterious
- B. It must play music
- C. It should be historically reliable
- D. It must not leak when carried in a bag

Q8. Design & Technology. Explain how triangular supports strengthen a structure.

Answer: _____

Answer: _____

Design & Technology Level 4 Stretch Challenge 2

These are the hardest questions in the chapter. They may combine subject knowledge, interpretation and explanation.

Q1. Design & Technology. Which is a design criterion for a school water bottle?

- A. It should be mysterious
- B. It must play music
- C. It should be historically reliable
- D. It must not leak when carried in a bag

Q2. Design & Technology. Describe one user need and one material property for a phone stand.

Answer: _____

Answer: _____

Q3. Design & Technology. What is the difference between aesthetics and function?

- A. Aesthetics means strength only
- B. Aesthetics is appearance; function is what it does
- C. Both mean colour only
- D. Function means history

Q4. Design & Technology. Explain how triangular supports strengthen a structure.

Answer: _____

Answer: _____

Q5. Design & Technology. Which is a design criterion for a school water bottle?

- A. It should be mysterious
- B. It must play music
- C. It should be historically reliable
- D. It must not leak when carried in a bag

Q6. Design & Technology. Describe one user need and one material property for a phone stand.

Answer: _____

Answer: _____

Q7. Design & Technology. What is the difference between aesthetics and function?

- A. Aesthetics means strength only
- B. Aesthetics is appearance; function is what it does
- C. Both mean colour only
- D. Function means history

Q8. Design & Technology. Explain how triangular supports strengthen a structure.

Answer: _____

Answer: _____

Design & Technology Answers and Explanations

Set	Q	Answer	Explanation
A1	1	D	A criterion states a measurable requirement.
A1	2	C	User testing gives relevant feedback.
A1	3	B	Design must consider both look and purpose.
A1	4	A	Triangulation strengthens structures.
A1	5	D	A criterion states a measurable requirement.
A1	6	C	User testing gives relevant feedback.
A1	7	B	Design must consider both look and purpose.
A1	8	A	Triangulation strengthens structures.
A1	9	D	A criterion states a measurable requirement.
A1	10	C	User testing gives relevant feedback.
A1	11	B	Design must consider both look and purpose.
A1	12	A	Triangulation strengthens structures.
A2	1	D	A criterion states a measurable requirement.
A2	2	C	User testing gives relevant feedback.
A2	3	B	Design must consider both look and purpose.
A2	4	A	Triangulation strengthens structures.
Set	Q	Answer	Explanation
A2	5	D	A criterion states a measurable requirement.
A2	6	C	User testing gives relevant feedback.
A2	7	B	Design must consider both look and purpose.
A2	8	A	Triangulation strengthens structures.
A2	9	D	A criterion states a measurable requirement.
A2	10	C	User testing gives relevant feedback.
A2	11	B	Design must consider both look and purpose.
A2	12	A	Triangulation strengthens structures.
A3	1	D	A criterion states a measurable requirement.
A3	2	C	User testing gives relevant feedback.
A3	3	B	Design must consider both look and purpose.
A3	4	A	Triangulation strengthens structures.
A3	5	D	A criterion states a measurable requirement.
A3	6	C	User testing gives relevant feedback.
A3	7	B	Design must consider both look and purpose.
A3	8	A	Triangulation strengthens structures.
Set	Q	Answer	Explanation
A3	9	D	A criterion states a measurable requirement.
A3	10	C	User testing gives relevant feedback.
A3	11	B	Design must consider both look and purpose.
A3	12	A	Triangulation strengthens structures.
A4	1	D	A criterion states a measurable requirement.
A4	2	C	User testing gives relevant feedback.
A4	3	B	Design must consider both look and purpose.
A4	4	A	Triangulation strengthens structures.
A4	5	D	A criterion states a measurable requirement.
A4	6	C	User testing gives relevant feedback.
A4	7	B	Design must consider both look and purpose.
A4	8	A	Triangulation strengthens structures.
A4	9	D	A criterion states a measurable requirement.
A4	10	C	User testing gives relevant feedback.
A4	11	B	Design must consider both look and purpose.

Set	Q	Answer	Explanation
A4	12	A	Triangulation strengthens structures.

Beacon answers should be marked for accuracy, vocabulary, reasoning and clarity. Accept any answer that is logically correct and uses the subject concept precisely.

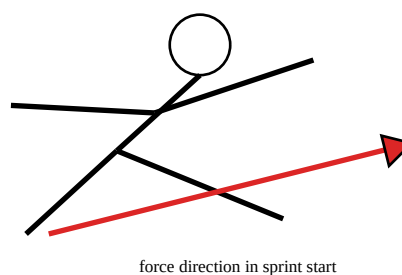
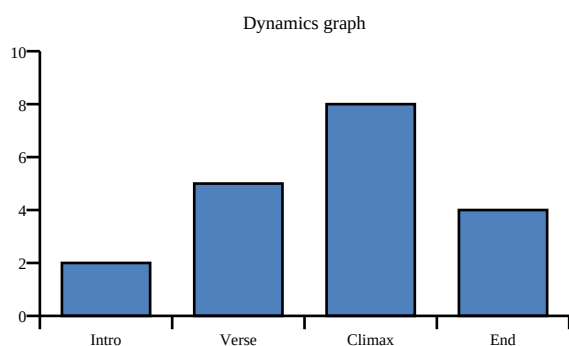
Chapter 10: Music - Hard KS3-Bridge Practice

This chapter trains advanced 11+ thinking in Music. The focus is not simple memory; the questions require interpretation, evidence, diagrams, comparison and precise explanation.

Subject skill map

- Understand and use specialist Music vocabulary precisely.
- Interpret diagrams, charts, tables or visual evidence.
- Eliminate tempting but weaker answer choices.
- Write short answers using exact terminology.
- Explain reasoning clearly under timed conditions.

Music + PE stimulus: data interpretation



Music Vocabulary Bank - 35 Hard Words

For each word, learn the meaning and how it might be tested in a hard question.

Word	Meaning	How it is tested / used
tempo	Key tempo concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
dynamics	Key dynamics concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
pitch	Key pitch concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
rhythm	Key rhythm concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
beat	Key beat concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
melody	Key melody concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
harmony	Key harmony concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
Word	Meaning	How it is tested / used
texture	Key texture concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
timbre	Key timbre concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
notation	Key notation concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
crotchet	Key crotchet concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
quaver	Key quaver concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
semibreve	Key semibreve concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
rest	Key rest concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
Word	Meaning	How it is tested / used
crescendo	Key crescendo concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
diminuendo	Key diminuendo concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
major key	Key major key concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
minor key	Key minor key concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
ostinato	Key ostinato concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
call and response	Key call and response concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
verse	Key verse concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
chorus	Key chorus concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
structure	Key structure concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
ensemble	Key ensemble concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
improvise	Key improvise concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
compose	Key compose concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
percussion	Key percussion concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
strings	Key strings concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
woodwind	Key woodwind concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
brass	Key brass concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
mood	Key mood concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
duration	Key duration concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
pulse	Key pulse concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
accent	Key accent concept used in harder applied questions	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.
syncopation	rhythm that stresses unexpected beats	Use this term when explaining music reasoning, interpreting a diagram, or writing a precise Beacon answer.

Music Vocabulary Application Drill 1

Use the target word accurately in context. Do not write a vague sentence. Your sentence must show the meaning.

1. Target word: tempo. Write a precise sentence connected to Music.

Sentence: _____

2. Target word: dynamics. Write a precise sentence connected to Music.

Sentence: _____

3. Target word: pitch. Write a precise sentence connected to Music.

Sentence: _____

4. Target word: rhythm. Write a precise sentence connected to Music.

Sentence: _____

5. Target word: beat. Write a precise sentence connected to Music.

Sentence: _____

6. Target word: melody. Write a precise sentence connected to Music.

Sentence: _____

7. Target word: harmony. Write a precise sentence connected to Music.

Sentence: _____

8. Target word: texture. Write a precise sentence connected to Music.

Sentence: _____

9. Target word: timbre. Write a precise sentence connected to Music.

Sentence: _____

10. Target word: notation. Write a precise sentence connected to Music.

Sentence: _____

11. Target word: crotchet. Write a precise sentence connected to Music.

Sentence: _____

12. Target word: quaver. Write a precise sentence connected to Music.

Sentence: _____

Music Vocabulary Application Drill 2

Use the target word accurately in context. Do not write a vague sentence. Your sentence must show the meaning.

1. Target word: semibreve. Write a precise sentence connected to Music.

Sentence: _____

2. Target word: rest. Write a precise sentence connected to Music.

Sentence: _____

3. Target word: crescendo. Write a precise sentence connected to Music.

Sentence: _____

4. Target word: diminuendo. Write a precise sentence connected to Music.

Sentence: _____

5. Target word: major key. Write a precise sentence connected to Music.

Sentence: _____

6. Target word: minor key. Write a precise sentence connected to Music.

Sentence: _____

7. Target word: ostinato. Write a precise sentence connected to Music.

Sentence: _____

8. Target word: call and response. Write a precise sentence connected to Music.

Sentence: _____

9. Target word: verse. Write a precise sentence connected to Music.

Sentence: _____

10. Target word: chorus. Write a precise sentence connected to Music.

Sentence: _____

11. Target word: structure. Write a precise sentence connected to Music.

Sentence: _____

12. Target word: ensemble. Write a precise sentence connected to Music.

Sentence: _____

Music Worked Examples - Hard Reasoning

Worked Example 1. A piece gradually becomes louder towards the climax. What is this?

- A. Diminuendo
- B. Rest
- C. Tempo
- D. Crescendo

Answer: D. Crescendo means getting louder.

Worked Example 2. Which describes timbre?

- A. The number of pages
- B. The historical date
- C. The unique quality or colour of a sound
- D. The speed of music

Answer: C. Timbre identifies sound quality.

Worked Example 3. Why might a composer use soft dynamics before a sudden loud chord?

- A. To change PE technique
- B. To create surprise and tension
- C. To make the piece silent forever
- D. To remove rhythm

Answer: B. Contrast in dynamics can create impact.

Worked Example 4. Which change is most likely to make a cheerful song sound sadder?

- A. Major to minor key
- B. Make it longer only
- C. Change the paper colour
- D. Remove all rhythm

Answer: A. Minor keys often create a sadder mood.

Music Adventure Set 1 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Music. A piece gradually becomes louder towards the climax. What is this?

- A. Diminuendo
- B. Rest
- C. Tempo
- D. Crescendo

Q2. Music. Which describes timbre?

- A. The number of pages
- B. The historical date
- C. The unique quality or colour of a sound
- D. The speed of music

Q3. Music. Why might a composer use soft dynamics before a sudden loud chord?

- A. To change PE technique
- B. To create surprise and tension
- C. To make the piece silent forever
- D. To remove rhythm

Q4. Music. Which change is most likely to make a cheerful song sound sadder?

- A. Major to minor key
- B. Make it longer only
- C. Change the paper colour
- D. Remove all rhythm

Q5. Music. A piece gradually becomes louder towards the climax. What is this?

- A. Diminuendo
- B. Rest
- C. Tempo
- D. Crescendo

Q6. Music. Which describes timbre?

- A. The number of pages
- B. The historical date
- C. The unique quality or colour of a sound
- D. The speed of music

Q7. Music. Why might a composer use soft dynamics before a sudden loud chord?

- A. To change PE technique
- B. To create surprise and tension
- C. To make the piece silent forever
- D. To remove rhythm

Q8. Music. Which change is most likely to make a cheerful song sound sadder?

- A. Major to minor key
- B. Make it longer only
- C. Change the paper colour
- D. Remove all rhythm

Q9. Music. A piece gradually becomes louder towards the climax. What is this?

- A. Diminuendo
- B. Rest
- C. Tempo
- D. Crescendo

Q10. Music. Which describes timbre?

- A. The number of pages
- B. The historical date
- C. The unique quality or colour of a sound
- D. The speed of music

Q11. Music. Why might a composer use soft dynamics before a sudden loud chord?

- A. To change PE technique
- B. To create surprise and tension
- C. To make the piece silent forever
- D. To remove rhythm

Q12. Music. Which change is most likely to make a cheerful song sound sadder?

- A. Major to minor key
- B. Make it longer only
- C. Change the paper colour
- D. Remove all rhythm

Music Adventure Set 2 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Music. A piece gradually becomes louder towards the climax. What is this?

- A. Diminuendo
- B. Rest
- C. Tempo
- D. Crescendo

Q2. Music. Which describes timbre?

- A. The number of pages
- B. The historical date
- C. The unique quality or colour of a sound
- D. The speed of music

Q3. Music. Why might a composer use soft dynamics before a sudden loud chord?

- A. To change PE technique
- B. To create surprise and tension
- C. To make the piece silent forever
- D. To remove rhythm

Q4. Music. Which change is most likely to make a cheerful song sound sadder?

- A. Major to minor key
- B. Make it longer only
- C. Change the paper colour
- D. Remove all rhythm

Q5. Music. A piece gradually becomes louder towards the climax. What is this?

- A. Diminuendo
- B. Rest
- C. Tempo
- D. Crescendo

Q6. Music. Which describes timbre?

- A. The number of pages
- B. The historical date
- C. The unique quality or colour of a sound
- D. The speed of music

Q7. Music. Why might a composer use soft dynamics before a sudden loud chord?

- A. To change PE technique
- B. To create surprise and tension
- C. To make the piece silent forever
- D. To remove rhythm

Q8. Music. Which change is most likely to make a cheerful song sound sadder?

- A. Major to minor key
- B. Make it longer only
- C. Change the paper colour
- D. Remove all rhythm

Q9. Music. A piece gradually becomes louder towards the climax. What is this?

- A. Diminuendo
- B. Rest
- C. Tempo
- D. Crescendo

Q10. Music. Which describes timbre?

- A. The number of pages
- B. The historical date
- C. The unique quality or colour of a sound
- D. The speed of music

Q11. Music. Why might a composer use soft dynamics before a sudden loud chord?

- A. To change PE technique
- B. To create surprise and tension
- C. To make the piece silent forever
- D. To remove rhythm

Q12. Music. Which change is most likely to make a cheerful song sound sadder?

- A. Major to minor key
- B. Make it longer only
- C. Change the paper colour
- D. Remove all rhythm

Music Adventure Set 3 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Music. A piece gradually becomes louder towards the climax. What is this?

- A. Diminuendo
- B. Rest
- C. Tempo
- D. Crescendo

Q2. Music. Which describes timbre?

- A. The number of pages
- B. The historical date
- C. The unique quality or colour of a sound
- D. The speed of music

Q3. Music. Why might a composer use soft dynamics before a sudden loud chord?

- A. To change PE technique
- B. To create surprise and tension
- C. To make the piece silent forever
- D. To remove rhythm

Q4. Music. Which change is most likely to make a cheerful song sound sadder?

- A. Major to minor key
- B. Make it longer only
- C. Change the paper colour
- D. Remove all rhythm

Q5. Music. A piece gradually becomes louder towards the climax. What is this?

- A. Diminuendo
- B. Rest
- C. Tempo
- D. Crescendo

Q6. Music. Which describes timbre?

- A. The number of pages
- B. The historical date
- C. The unique quality or colour of a sound
- D. The speed of music

Q7. Music. Why might a composer use soft dynamics before a sudden loud chord?

- A. To change PE technique
- B. To create surprise and tension
- C. To make the piece silent forever
- D. To remove rhythm

Q8. Music. Which change is most likely to make a cheerful song sound sadder?

- A. Major to minor key
- B. Make it longer only
- C. Change the paper colour
- D. Remove all rhythm

Q9. Music. A piece gradually becomes louder towards the climax. What is this?

- A. Diminuendo
- B. Rest
- C. Tempo
- D. Crescendo

Q10. Music. Which describes timbre?

- A. The number of pages
- B. The historical date
- C. The unique quality or colour of a sound
- D. The speed of music

Q11. Music. Why might a composer use soft dynamics before a sudden loud chord?

- A. To change PE technique
- B. To create surprise and tension
- C. To make the piece silent forever
- D. To remove rhythm

Q12. Music. Which change is most likely to make a cheerful song sound sadder?

- A. Major to minor key
- B. Make it longer only
- C. Change the paper colour
- D. Remove all rhythm

Music Adventure Set 4 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Music. A piece gradually becomes louder towards the climax. What is this?

- A. Diminuendo
- B. Rest
- C. Tempo
- D. Crescendo

Q2. Music. Which describes timbre?

- A. The number of pages
- B. The historical date
- C. The unique quality or colour of a sound
- D. The speed of music

Q3. Music. Why might a composer use soft dynamics before a sudden loud chord?

- A. To change PE technique
- B. To create surprise and tension
- C. To make the piece silent forever
- D. To remove rhythm

Q4. Music. Which change is most likely to make a cheerful song sound sadder?

- A. Major to minor key
- B. Make it longer only
- C. Change the paper colour
- D. Remove all rhythm

Q5. Music. A piece gradually becomes louder towards the climax. What is this?

- A. Diminuendo
- B. Rest
- C. Tempo
- D. Crescendo

Q6. Music. Which describes timbre?

- A. The number of pages
- B. The historical date
- C. The unique quality or colour of a sound
- D. The speed of music

Q7. Music. Why might a composer use soft dynamics before a sudden loud chord?

- A. To change PE technique
- B. To create surprise and tension
- C. To make the piece silent forever
- D. To remove rhythm

Q8. Music. Which change is most likely to make a cheerful song sound sadder?

- A. Major to minor key
- B. Make it longer only
- C. Change the paper colour
- D. Remove all rhythm

Q9. Music. A piece gradually becomes louder towards the climax. What is this?

- A. Diminuendo
- B. Rest
- C. Tempo
- D. Crescendo

Q10. Music. Which describes timbre?

- A. The number of pages
- B. The historical date
- C. The unique quality or colour of a sound
- D. The speed of music

Q11. Music. Why might a composer use soft dynamics before a sudden loud chord?

- A. To change PE technique
- B. To create surprise and tension
- C. To make the piece silent forever
- D. To remove rhythm

Q12. Music. Which change is most likely to make a cheerful song sound sadder?

- A. Major to minor key
- B. Make it longer only
- C. Change the paper colour
- D. Remove all rhythm

Music Beacon Set 1 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Music. Describe the effect of a crescendo before a climax.

Answer: _____

Answer: _____

Q2. Music. Compare major and minor key in terms of mood.

Answer: _____

Answer: _____

Q3. Music. Explain the difference between rhythm and beat.

Answer: _____

Answer: _____

Q4. Music. Explain how tempo and dynamics can change mood.

Answer: _____

Answer: _____

Q5. Music. Describe the effect of a crescendo before a climax.

Answer: _____

Answer: _____

Q6. Music. Compare major and minor key in terms of mood.

Answer: _____

Answer: _____

Q7. Music. Explain the difference between rhythm and beat.

Answer: _____

Answer: _____

Q8. Music. Explain how tempo and dynamics can change mood.

Answer: _____

Answer: _____

Q9. Music. Describe the effect of a crescendo before a climax.

Answer: _____

Answer: _____

Q10. Music. Compare major and minor key in terms of mood.

Answer: _____

Answer: _____

Music Beacon Set 2 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Music. Explain the difference between rhythm and beat.

Answer: _____

Answer: _____

Q2. Music. Explain how tempo and dynamics can change mood.

Answer: _____

Answer: _____

Q3. Music. Describe the effect of a crescendo before a climax.

Answer: _____

Answer: _____

Q4. Music. Compare major and minor key in terms of mood.

Answer: _____

Answer: _____

Q5. Music. Explain the difference between rhythm and beat.

Answer: _____

Answer: _____

Q6. Music. Explain how tempo and dynamics can change mood.

Answer: _____

Answer: _____

Q7. Music. Describe the effect of a crescendo before a climax.

Answer: _____

Answer: _____

Q8. Music. Compare major and minor key in terms of mood.

Answer: _____

Answer: _____

Q9. Music. Explain the difference between rhythm and beat.

Answer: _____

Answer: _____

Q10. Music. Explain how tempo and dynamics can change mood.

Answer: _____

Answer: _____

Music Beacon Set 3 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Music. Describe the effect of a crescendo before a climax.

Answer: _____

Answer: _____

Q2. Music. Compare major and minor key in terms of mood.

Answer: _____

Answer: _____

Q3. Music. Explain the difference between rhythm and beat.

Answer: _____

Answer: _____

Q4. Music. Explain how tempo and dynamics can change mood.

Answer: _____

Answer: _____

Q5. Music. Describe the effect of a crescendo before a climax.

Answer: _____

Answer: _____

Q6. Music. Compare major and minor key in terms of mood.

Answer: _____

Answer: _____

Q7. Music. Explain the difference between rhythm and beat.

Answer: _____

Answer: _____

Q8. Music. Explain how tempo and dynamics can change mood.

Answer: _____

Answer: _____

Q9. Music. Describe the effect of a crescendo before a climax.

Answer: _____

Answer: _____

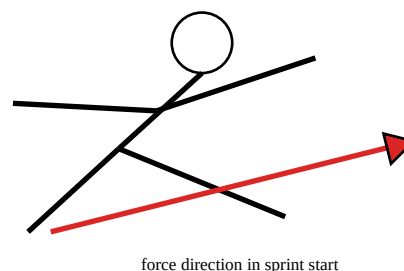
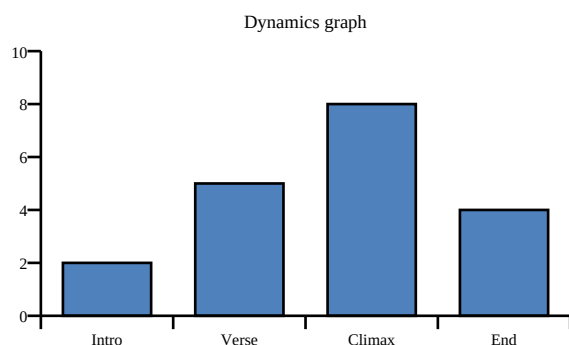
Q10. Music. Compare major and minor key in terms of mood.

Answer: _____

Answer: _____

Music Diagram / Visual Challenge 1

Music + PE stimulus: data interpretation



Use the visual stimulus above. These questions require interpreting the diagram rather than simply remembering facts.

Q1. Music. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q2. Music. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q3. Music. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q4. Music. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q5. Music. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q6. Music. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

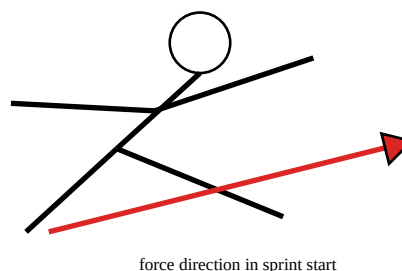
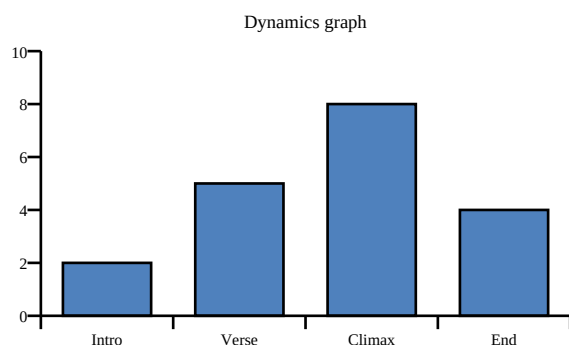
Answer: _____

Answer: _____

Answer: _____

Music Diagram / Visual Challenge 2

Music + PE stimulus: data interpretation



Use the visual stimulus above. These questions require interpreting the diagram rather than simply remembering facts.

Q1. Music. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q2. Music. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q3. Music. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q4. Music. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q5. Music. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q6. Music. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Music Level 4 Stretch Challenge 1

These are the hardest questions in the chapter. They may combine subject knowledge, interpretation and explanation.

Q1. Music. Why might a composer use soft dynamics before a sudden loud chord?

- A. To change PE technique
- B. To create surprise and tension
- C. To make the piece silent forever
- D. To remove rhythm

Q2. Music. Compare major and minor key in terms of mood.

Answer: _____

Answer: _____

Q3. Music. A piece gradually becomes louder towards the climax. What is this?

- A. Diminuendo
- B. Rest
- C. Tempo
- D. Crescendo

Q4. Music. Explain how tempo and dynamics can change mood.

Answer: _____

Answer: _____

Q5. Music. Why might a composer use soft dynamics before a sudden loud chord?

- A. To change PE technique
- B. To create surprise and tension
- C. To make the piece silent forever
- D. To remove rhythm

Q6. Music. Compare major and minor key in terms of mood.

Answer: _____

Answer: _____

Q7. Music. A piece gradually becomes louder towards the climax. What is this?

- A. Diminuendo
- B. Rest
- C. Tempo
- D. Crescendo

Q8. Music. Explain how tempo and dynamics can change mood.

Answer: _____

Answer: _____

Music Level 4 Stretch Challenge 2

These are the hardest questions in the chapter. They may combine subject knowledge, interpretation and explanation.

Q1. Music. A piece gradually becomes louder towards the climax. What is this?

- A. Diminuendo
- B. Rest
- C. Tempo
- D. Crescendo

Q2. Music. Compare major and minor key in terms of mood.

Answer: _____

Answer: _____

Q3. Music. Why might a composer use soft dynamics before a sudden loud chord?

- A. To change PE technique
- B. To create surprise and tension
- C. To make the piece silent forever
- D. To remove rhythm

Q4. Music. Explain how tempo and dynamics can change mood.

Answer: _____

Answer: _____

Q5. Music. A piece gradually becomes louder towards the climax. What is this?

- A. Diminuendo
- B. Rest
- C. Tempo
- D. Crescendo

Q6. Music. Compare major and minor key in terms of mood.

Answer: _____

Answer: _____

Q7. Music. Why might a composer use soft dynamics before a sudden loud chord?

- A. To change PE technique
- B. To create surprise and tension
- C. To make the piece silent forever
- D. To remove rhythm

Q8. Music. Explain how tempo and dynamics can change mood.

Answer: _____

Answer: _____

Music Answers and Explanations

Set	Q	Answer	Explanation
A1	1	D	Crescendo means getting louder.
A1	2	C	Timbre identifies sound quality.
A1	3	B	Contrast in dynamics can create impact.
A1	4	A	Minor keys often create a sadder mood.
A1	5	D	Crescendo means getting louder.
A1	6	C	Timbre identifies sound quality.
A1	7	B	Contrast in dynamics can create impact.
A1	8	A	Minor keys often create a sadder mood.
A1	9	D	Crescendo means getting louder.
A1	10	C	Timbre identifies sound quality.
A1	11	B	Contrast in dynamics can create impact.
A1	12	A	Minor keys often create a sadder mood.
A2	1	D	Crescendo means getting louder.
A2	2	C	Timbre identifies sound quality.
A2	3	B	Contrast in dynamics can create impact.
A2	4	A	Minor keys often create a sadder mood.

Set	Q	Answer	Explanation
A2	5	D	Crescendo means getting louder.
A2	6	C	Timbre identifies sound quality.
A2	7	B	Contrast in dynamics can create impact.
A2	8	A	Minor keys often create a sadder mood.
A2	9	D	Crescendo means getting louder.
A2	10	C	Timbre identifies sound quality.
A2	11	B	Contrast in dynamics can create impact.
A2	12	A	Minor keys often create a sadder mood.
A3	1	D	Crescendo means getting louder.
A3	2	C	Timbre identifies sound quality.
A3	3	B	Contrast in dynamics can create impact.
A3	4	A	Minor keys often create a sadder mood.
A3	5	D	Crescendo means getting louder.
A3	6	C	Timbre identifies sound quality.
A3	7	B	Contrast in dynamics can create impact.
A3	8	A	Minor keys often create a sadder mood.

Set	Q	Answer	Explanation
A3	9	D	Crescendo means getting louder.
A3	10	C	Timbre identifies sound quality.
A3	11	B	Contrast in dynamics can create impact.
A3	12	A	Minor keys often create a sadder mood.
A4	1	D	Crescendo means getting louder.
A4	2	C	Timbre identifies sound quality.
A4	3	B	Contrast in dynamics can create impact.
A4	4	A	Minor keys often create a sadder mood.
A4	5	D	Crescendo means getting louder.
A4	6	C	Timbre identifies sound quality.
A4	7	B	Contrast in dynamics can create impact.
A4	8	A	Minor keys often create a sadder mood.
A4	9	D	Crescendo means getting louder.
A4	10	C	Timbre identifies sound quality.
A4	11	B	Contrast in dynamics can create impact.

Set	Q	Answer	Explanation
A4	12	A	Minor keys often create a sadder mood.

Beacon answers should be marked for accuracy, vocabulary, reasoning and clarity. Accept any answer that is logically correct and uses the subject concept precisely.

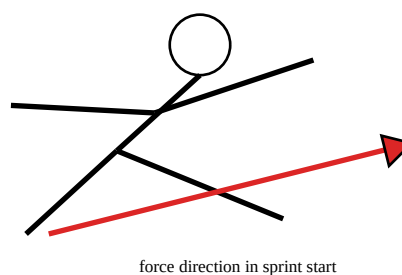
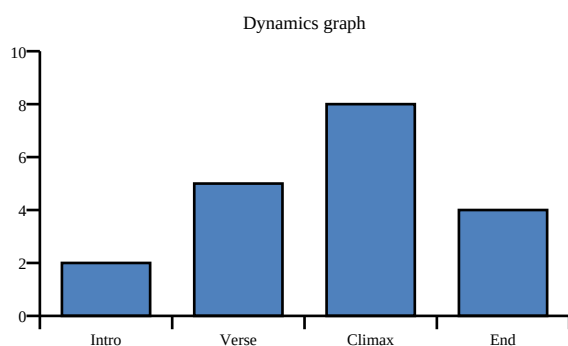
Chapter 11: Physical Education - Hard KS3-Bridge Practice

This chapter trains advanced 11+ thinking in Physical Education. The focus is not simple memory; the questions require interpretation, evidence, diagrams, comparison and precise explanation.

Subject skill map

- Understand and use specialist Physical Education vocabulary precisely.
- Interpret diagrams, charts, tables or visual evidence.
- Eliminate tempting but weaker answer choices.
- Write short answers using exact terminology.
- Explain reasoning clearly under timed conditions.

Music + PE stimulus: data interpretation



Physical Education Vocabulary Bank - 35 Hard Words

For each word, learn the meaning and how it might be tested in a hard question.

Word	Meaning	How it is tested / used
stamina	Key stamina concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
endurance	Key endurance concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
agility	Key agility concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
balance	Key balance concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
coordination	Key coordination concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
flexibility	Key flexibility concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
reaction time	Key reaction time concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
Word	Meaning	How it is tested / used
speed	Key speed concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
power	Key power concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
strength	Key strength concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
warm-up	Key warm-up concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
cool-down	Key cool-down concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
pulse rate	Key pulse rate concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
hydration	Key hydration concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
Word	Meaning	How it is tested / used
recovery	Key recovery concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
technique	Key technique concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
tactic	Key tactic concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.

Word	Meaning	How it is tested / used
strategy	Key strategy concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
attack	Key attack concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
defence	Key defence concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
sportsmanship	Key sportsmanship concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
Word	Meaning	How it is tested / used
respect	Key respect concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
official	Key official concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
rule	Key rule concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
fair play	Key fair play concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
teamwork	Key teamwork concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
spatial awareness	Key spatial awareness concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
body position	Key body position concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
Word	Meaning	How it is tested / used
force direction	Key force direction concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
acceleration	Key acceleration concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
anaerobic	Key anaerobic concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
aerobic	Key aerobic concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
injury prevention	Key injury prevention concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
performance analysis	Key performance analysis concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.
target setting	Key target setting concept used in harder applied questions	Use this term when explaining physical education reasoning, interpreting a diagram, or writing a precise Beacon answer.

Physical Education Vocabulary Application Drill 1

Use the target word accurately in context. Do not write a vague sentence. Your sentence must show the meaning.

1. Target word: stamina. Write a precise sentence connected to Physical Education.

Sentence: _____

2. Target word: endurance. Write a precise sentence connected to Physical Education.

Sentence: _____

3. Target word: agility. Write a precise sentence connected to Physical Education.

Sentence: _____

4. Target word: balance. Write a precise sentence connected to Physical Education.

Sentence: _____

5. Target word: coordination. Write a precise sentence connected to Physical Education.

Sentence: _____

6. Target word: flexibility. Write a precise sentence connected to Physical Education.

Sentence: _____

7. Target word: reaction time. Write a precise sentence connected to Physical Education.

Sentence: _____

8. Target word: speed. Write a precise sentence connected to Physical Education.

Sentence: _____

9. Target word: power. Write a precise sentence connected to Physical Education.

Sentence: _____

10. Target word: strength. Write a precise sentence connected to Physical Education.

Sentence: _____

11. Target word: warm-up. Write a precise sentence connected to Physical Education.

Sentence: _____

12. Target word: cool-down. Write a precise sentence connected to Physical Education.

Sentence: _____

Physical Education Vocabulary Application Drill 2

Use the target word accurately in context. Do not write a vague sentence. Your sentence must show the meaning.

1. Target word: pulse rate. Write a precise sentence connected to Physical Education.

Sentence: _____

2. Target word: hydration. Write a precise sentence connected to Physical Education.

Sentence: _____

3. Target word: recovery. Write a precise sentence connected to Physical Education.

Sentence: _____

4. Target word: technique. Write a precise sentence connected to Physical Education.

Sentence: _____

5. Target word: tactic. Write a precise sentence connected to Physical Education.

Sentence: _____

6. Target word: strategy. Write a precise sentence connected to Physical Education.

Sentence: _____

7. Target word: attack. Write a precise sentence connected to Physical Education.

Sentence: _____

8. Target word: defence. Write a precise sentence connected to Physical Education.

Sentence: _____

9. Target word: sportsmanship. Write a precise sentence connected to Physical Education.

Sentence: _____

10. Target word: respect. Write a precise sentence connected to Physical Education.

Sentence: _____

11. Target word: official. Write a precise sentence connected to Physical Education.

Sentence: _____

12. Target word: rule. Write a precise sentence connected to Physical Education.

Sentence: _____

Physical Education Worked Examples - Hard Reasoning

Worked Example 1. Which factor most improves quick changes of direction?

- A. Perspective
- B. Crescendo
- C. Chronology
- D. Agility

Answer: D. Agility is the ability to move quickly and change direction.

Worked Example 2. Why is technique analysis useful after a performance?

- A. It measures rainfall
- B. It changes the score automatically
- C. It identifies specific improvements
- D. It removes the need to practise

Answer: C. Analysis guides improvement.

Worked Example 3. Which is the best example of sportsmanship?

- A. Ignoring team-mates
- B. Accepting a referee's decision respectfully
- C. Arguing after every decision
- D. Hiding the rules

Answer: B. Sportsmanship includes fairness and respect.

Worked Example 4. Why is a warm-up useful before sprinting?

- A. It prepares muscles and raises pulse gradually
- B. It replaces training
- C. It lowers coordination
- D. It makes rules unnecessary

Answer: A. Warm-ups prepare the body and reduce injury risk.

Physical Education Adventure Set 1 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Physical Education. Which factor most improves quick changes of direction?

- A. Perspective
- B. Crescendo
- C. Chronology
- D. Agility

Q2. Physical Education. Why is technique analysis useful after a performance?

- A. It measures rainfall
- B. It changes the score automatically
- C. It identifies specific improvements
- D. It removes the need to practise

Q3. Physical Education. Which is the best example of sportsmanship?

- A. Ignoring team-mates
- B. Accepting a referee's decision respectfully
- C. Arguing after every decision
- D. Hiding the rules

Q4. Physical Education. Why is a warm-up useful before sprinting?

- A. It prepares muscles and raises pulse gradually
- B. It replaces training
- C. It lowers coordination
- D. It makes rules unnecessary

Q5. Physical Education. Which factor most improves quick changes of direction?

- A. Perspective
- B. Crescendo
- C. Chronology
- D. Agility

Q6. Physical Education. Why is technique analysis useful after a performance?

- A. It measures rainfall
- B. It changes the score automatically
- C. It identifies specific improvements
- D. It removes the need to practise

Q7. Physical Education. Which is the best example of sportsmanship?

- A. Ignoring team-mates
- B. Accepting a referee's decision respectfully
- C. Arguing after every decision
- D. Hiding the rules

Q8. Physical Education. Why is a warm-up useful before sprinting?

- A. It prepares muscles and raises pulse gradually
- B. It replaces training
- C. It lowers coordination
- D. It makes rules unnecessary

Q9. Physical Education. Which factor most improves quick changes of direction?

- A. Perspective
- B. Crescendo
- C. Chronology
- D. Agility

Q10. Physical Education. Why is technique analysis useful after a performance?

- A. It measures rainfall
- B. It changes the score automatically
- C. It identifies specific improvements
- D. It removes the need to practise

Q11. Physical Education. Which is the best example of sportsmanship?

- A. Ignoring team-mates
- B. Accepting a referee's decision respectfully
- C. Arguing after every decision
- D. Hiding the rules

Q12. Physical Education. Why is a warm-up useful before sprinting?

- A. It prepares muscles and raises pulse gradually
- B. It replaces training
- C. It lowers coordination
- D. It makes rules unnecessary

Physical Education Adventure Set 2 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Physical Education. Which factor most improves quick changes of direction?

- A. Perspective
- B. Crescendo
- C. Chronology
- D. Agility

Q2. Physical Education. Why is technique analysis useful after a performance?

- A. It measures rainfall
- B. It changes the score automatically
- C. It identifies specific improvements
- D. It removes the need to practise

Q3. Physical Education. Which is the best example of sportsmanship?

- A. Ignoring team-mates
- B. Accepting a referee's decision respectfully
- C. Arguing after every decision
- D. Hiding the rules

Q4. Physical Education. Why is a warm-up useful before sprinting?

- A. It prepares muscles and raises pulse gradually
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- D. It makes rules unnecessary

Q5. Physical Education. Which factor most improves quick changes of direction?

- A. Perspective
- B. Crescendo
- C. Chronology
- D. Agility

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- A. It measures rainfall
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- D. It removes the need to practise

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- A. Ignoring team-mates
- B. Accepting a referee's decision respectfully
- C. Arguing after every decision
- D. Hiding the rules

Q8. Physical Education. Why is a warm-up useful before sprinting?

- A. It prepares muscles and raises pulse gradually
- B. It replaces training
- C. It lowers coordination
- D. It makes rules unnecessary

Q9. Physical Education. Which factor most improves quick changes of direction?

- A. Perspective
- B. Crescendo
- C. Chronology
- D. Agility

Q10. Physical Education. Why is technique analysis useful after a performance?

- A. It measures rainfall
- B. It changes the score automatically
- C. It identifies specific improvements
- D. It removes the need to practise

Q11. Physical Education. Which is the best example of sportsmanship?

- A. Ignoring team-mates
- B. Accepting a referee's decision respectfully
- C. Arguing after every decision
- D. Hiding the rules

Q12. Physical Education. Why is a warm-up useful before sprinting?

- A. It prepares muscles and raises pulse gradually
- B. It replaces training
- C. It lowers coordination
- D. It makes rules unnecessary

Physical Education Adventure Set 3 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Physical Education. Which factor most improves quick changes of direction?

- A. Perspective
- B. Crescendo
- C. Chronology
- D. Agility

Q2. Physical Education. Why is technique analysis useful after a performance?

- A. It measures rainfall
- B. It changes the score automatically
- C. It identifies specific improvements
- D. It removes the need to practise

Q3. Physical Education. Which is the best example of sportsmanship?

- A. Ignoring team-mates
- B. Accepting a referee's decision respectfully
- C. Arguing after every decision
- D. Hiding the rules

Q4. Physical Education. Why is a warm-up useful before sprinting?

- A. It prepares muscles and raises pulse gradually
- B. It replaces training
- C. It lowers coordination
- D. It makes rules unnecessary

Q5. Physical Education. Which factor most improves quick changes of direction?

- A. Perspective
- B. Crescendo
- C. Chronology
- D. Agility

Q6. Physical Education. Why is technique analysis useful after a performance?

- A. It measures rainfall
- B. It changes the score automatically
- C. It identifies specific improvements
- D. It removes the need to practise

Q7. Physical Education. Which is the best example of sportsmanship?

- A. Ignoring team-mates
- B. Accepting a referee's decision respectfully
- C. Arguing after every decision
- D. Hiding the rules

Q8. Physical Education. Why is a warm-up useful before sprinting?

- A. It prepares muscles and raises pulse gradually
- B. It replaces training
- C. It lowers coordination
- D. It makes rules unnecessary

Q9. Physical Education. Which factor most improves quick changes of direction?

- A. Perspective
- B. Crescendo
- C. Chronology
- D. Agility

Q10. Physical Education. Why is technique analysis useful after a performance?

- A. It measures rainfall
- B. It changes the score automatically
- C. It identifies specific improvements
- D. It removes the need to practise

Q11. Physical Education. Which is the best example of sportsmanship?

- A. Ignoring team-mates
- B. Accepting a referee's decision respectfully
- C. Arguing after every decision
- D. Hiding the rules

Q12. Physical Education. Why is a warm-up useful before sprinting?

- A. It prepares muscles and raises pulse gradually
- B. It replaces training
- C. It lowers coordination
- D. It makes rules unnecessary

Physical Education Adventure Set 4 - Hard Multiple Choice

Timing suggestion: 12 questions in 10-12 minutes. Read each scenario carefully. Some wrong options are deliberately close.

Q1. Physical Education. Which factor most improves quick changes of direction?

- A. Perspective
- B. Crescendo
- C. Chronology
- D. Agility

Q2. Physical Education. Why is technique analysis useful after a performance?

- A. It measures rainfall
- B. It changes the score automatically
- C. It identifies specific improvements
- D. It removes the need to practise

Q3. Physical Education. Which is the best example of sportsmanship?

- A. Ignoring team-mates
- B. Accepting a referee's decision respectfully
- C. Arguing after every decision
- D. Hiding the rules

Q4. Physical Education. Why is a warm-up useful before sprinting?

- A. It prepares muscles and raises pulse gradually
- B. It replaces training
- C. It lowers coordination
- D. It makes rules unnecessary

Q5. Physical Education. Which factor most improves quick changes of direction?

- A. Perspective
- B. Crescendo
- C. Chronology
- D. Agility

Q6. Physical Education. Why is technique analysis useful after a performance?

- A. It measures rainfall
- B. It changes the score automatically
- C. It identifies specific improvements
- D. It removes the need to practise

Q7. Physical Education. Which is the best example of sportsmanship?

- A. Ignoring team-mates
- B. Accepting a referee's decision respectfully
- C. Arguing after every decision
- D. Hiding the rules

Q8. Physical Education. Why is a warm-up useful before sprinting?

- A. It prepares muscles and raises pulse gradually
- B. It replaces training
- C. It lowers coordination
- D. It makes rules unnecessary

Q9. Physical Education. Which factor most improves quick changes of direction?

- A. Perspective
- B. Crescendo
- C. Chronology
- D. Agility

Q10. Physical Education. Why is technique analysis useful after a performance?

- A. It measures rainfall
- B. It changes the score automatically
- C. It identifies specific improvements
- D. It removes the need to practise

Q11. Physical Education. Which is the best example of sportsmanship?

- A. Ignoring team-mates
- B. Accepting a referee's decision respectfully
- C. Arguing after every decision
- D. Hiding the rules

Q12. Physical Education. Why is a warm-up useful before sprinting?

- A. It prepares muscles and raises pulse gradually
- B. It replaces training
- C. It lowers coordination
- D. It makes rules unnecessary

Physical Education Beacon Set 1 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Physical Education. Describe how agility helps in football or netball.

Answer: _____

Answer: _____

Q2. Physical Education. Explain how pulse rate can show exercise intensity.

Answer: _____

Answer: _____

Q3. Physical Education. Give one technique improvement for a sprint start.

Answer: _____

Answer: _____

Q4. Physical Education. Explain why warm-up and cool-down are different.

Answer: _____

Answer: _____

Q5. Physical Education. Describe how agility helps in football or netball.

Answer: _____

Answer: _____

Q6. Physical Education. Explain how pulse rate can show exercise intensity.

Answer: _____

Answer: _____

Q7. Physical Education. Give one technique improvement for a sprint start.

Answer: _____

Answer: _____

Q8. Physical Education. Explain why warm-up and cool-down are different.

Answer: _____

Answer: _____

Q9. Physical Education. Describe how agility helps in football or netball.

Answer: _____

Answer: _____

Q10. Physical Education. Explain how pulse rate can show exercise intensity.

Answer: _____

Answer: _____

Physical Education Beacon Set 2 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Physical Education. Give one technique improvement for a sprint start.

Answer: _____

Answer: _____

Q2. Physical Education. Explain why warm-up and cool-down are different.

Answer: _____

Answer: _____

Q3. Physical Education. Describe how agility helps in football or netball.

Answer: _____

Answer: _____

Q4. Physical Education. Explain how pulse rate can show exercise intensity.

Answer: _____

Answer: _____

Q5. Physical Education. Give one technique improvement for a sprint start.

Answer: _____

Answer: _____

Q6. Physical Education. Explain why warm-up and cool-down are different.

Answer: _____

Answer: _____

Q7. Physical Education. Describe how agility helps in football or netball.

Answer: _____

Answer: _____

Q8. Physical Education. Explain how pulse rate can show exercise intensity.

Answer: _____

Answer: _____

Q9. Physical Education. Give one technique improvement for a sprint start.

Answer: _____

Answer: _____

Q10. Physical Education. Explain why warm-up and cool-down are different.

Answer: _____

Answer: _____

Physical Education Beacon Set 3 - Hard Short Written Answers

Write concise answers. Use subject vocabulary. A strong answer explains the reason, not only the final word.

Q1. Physical Education. Describe how agility helps in football or netball.

Answer: _____

Answer: _____

Q2. Physical Education. Explain how pulse rate can show exercise intensity.

Answer: _____

Answer: _____

Q3. Physical Education. Give one technique improvement for a sprint start.

Answer: _____

Answer: _____

Q4. Physical Education. Explain why warm-up and cool-down are different.

Answer: _____

Answer: _____

Q5. Physical Education. Describe how agility helps in football or netball.

Answer: _____

Answer: _____

Q6. Physical Education. Explain how pulse rate can show exercise intensity.

Answer: _____

Answer: _____

Q7. Physical Education. Give one technique improvement for a sprint start.

Answer: _____

Answer: _____

Q8. Physical Education. Explain why warm-up and cool-down are different.

Answer: _____

Answer: _____

Q9. Physical Education. Describe how agility helps in football or netball.

Answer: _____

Answer: _____

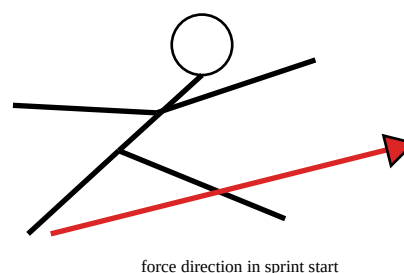
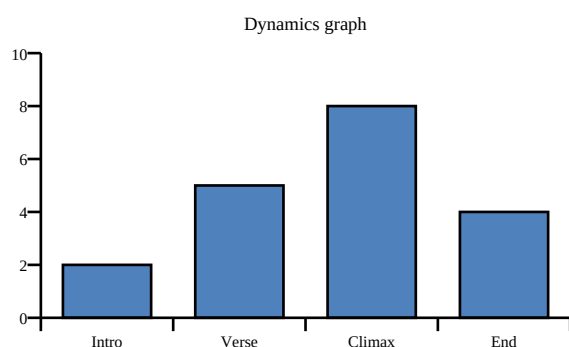
Q10. Physical Education. Explain how pulse rate can show exercise intensity.

Answer: _____

Answer: _____

Physical Education Diagram / Visual Challenge 1

Music + PE stimulus: data interpretation



Use the visual stimulus above. These questions require interpreting the diagram rather than simply remembering facts.

Q1. Physical Education. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q2. Physical Education. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q3. Physical Education. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q4. Physical Education. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q5. Physical Education. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q6. Physical Education. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

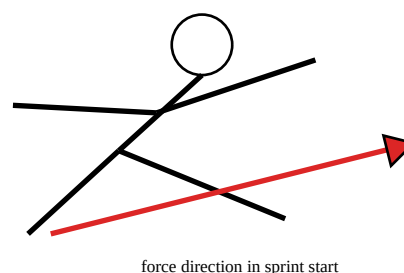
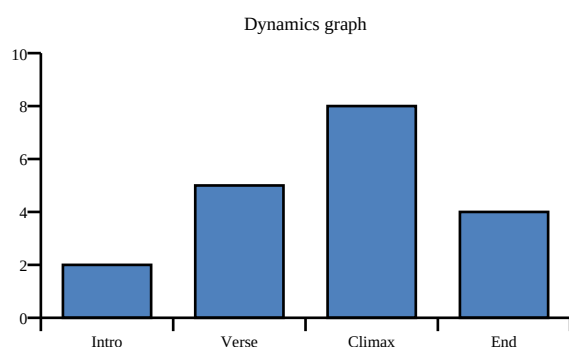
Answer: _____

Answer: _____

Answer: _____

Physical Education Diagram / Visual Challenge 2

Music + PE stimulus: data interpretation



Use the visual stimulus above. These questions require interpreting the diagram rather than simply remembering facts.

Q1. Physical Education. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q2. Physical Education. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q3. Physical Education. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q4. Physical Education. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q5. Physical Education. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Q6. Physical Education. Using the diagram, explain one pattern, relationship, weakness or conclusion that a careful student should notice. Use at least one subject-specific word.

Answer: _____

Answer: _____

Answer: _____

Physical Education Level 4 Stretch Challenge 1

These are the hardest questions in the chapter. They may combine subject knowledge, interpretation and explanation.

Q1. Physical Education. Which is the best example of sportsmanship?

- A. Ignoring team-mates
- B. Accepting a referee's decision respectfully
- C. Arguing after every decision
- D. Hiding the rules

Q2. Physical Education. Explain how pulse rate can show exercise intensity.

Answer: _____

Answer: _____

Q3. Physical Education. Which factor most improves quick changes of direction?

- A. Perspective
- B. Crescendo
- C. Chronology
- D. Agility

Q4. Physical Education. Explain why warm-up and cool-down are different.

Answer: _____

Answer: _____

Q5. Physical Education. Which is the best example of sportsmanship?

- A. Ignoring team-mates
- B. Accepting a referee's decision respectfully
- C. Arguing after every decision
- D. Hiding the rules

Q6. Physical Education. Explain how pulse rate can show exercise intensity.

Answer: _____

Answer: _____

Q7. Physical Education. Which factor most improves quick changes of direction?

- A. Perspective
- B. Crescendo
- C. Chronology
- D. Agility

Q8. Physical Education. Explain why warm-up and cool-down are different.

Answer: _____

Answer: _____

Physical Education Level 4 Stretch Challenge 2

These are the hardest questions in the chapter. They may combine subject knowledge, interpretation and explanation.

Q1. Physical Education. Which factor most improves quick changes of direction?

- A. Perspective
- B. Crescendo
- C. Chronology
- D. Agility

Q2. Physical Education. Explain how pulse rate can show exercise intensity.

Answer: _____

Answer: _____

Q3. Physical Education. Which is the best example of sportsmanship?

- A. Ignoring team-mates
- B. Accepting a referee's decision respectfully
- C. Arguing after every decision
- D. Hiding the rules

Q4. Physical Education. Explain why warm-up and cool-down are different.

Answer: _____

Answer: _____

Q5. Physical Education. Which factor most improves quick changes of direction?

- A. Perspective
- B. Crescendo
- C. Chronology
- D. Agility

Q6. Physical Education. Explain how pulse rate can show exercise intensity.

Answer: _____

Answer: _____

Q7. Physical Education. Which is the best example of sportsmanship?

- A. Ignoring team-mates
- B. Accepting a referee's decision respectfully
- C. Arguing after every decision
- D. Hiding the rules

Q8. Physical Education. Explain why warm-up and cool-down are different.

Answer: _____

Answer: _____

Physical Education Answers and Explanations

Set	Q	Answer	Explanation
A1	1	D	Agility is the ability to move quickly and change direction.
A1	2	C	Analysis guides improvement.
A1	3	B	Sportsmanship includes fairness and respect.
A1	4	A	Warm-ups prepare the body and reduce injury risk.
A1	5	D	Agility is the ability to move quickly and change direction.
A1	6	C	Analysis guides improvement.
A1	7	B	Sportsmanship includes fairness and respect.
A1	8	A	Warm-ups prepare the body and reduce injury risk.
A1	9	D	Agility is the ability to move quickly and change direction.
A1	10	C	Analysis guides improvement.
A1	11	B	Sportsmanship includes fairness and respect.
A1	12	A	Warm-ups prepare the body and reduce injury risk.
A2	1	D	Agility is the ability to move quickly and change direction.
A2	2	C	Analysis guides improvement.
A2	3	B	Sportsmanship includes fairness and respect.
A2	4	A	Warm-ups prepare the body and reduce injury risk.
Set	Q	Answer	Explanation
A2	5	D	Agility is the ability to move quickly and change direction.
A2	6	C	Analysis guides improvement.
A2	7	B	Sportsmanship includes fairness and respect.
A2	8	A	Warm-ups prepare the body and reduce injury risk.
A2	9	D	Agility is the ability to move quickly and change direction.
A2	10	C	Analysis guides improvement.
A2	11	B	Sportsmanship includes fairness and respect.
A2	12	A	Warm-ups prepare the body and reduce injury risk.
A3	1	D	Agility is the ability to move quickly and change direction.
A3	2	C	Analysis guides improvement.
A3	3	B	Sportsmanship includes fairness and respect.
A3	4	A	Warm-ups prepare the body and reduce injury risk.
A3	5	D	Agility is the ability to move quickly and change direction.
A3	6	C	Analysis guides improvement.
A3	7	B	Sportsmanship includes fairness and respect.
A3	8	A	Warm-ups prepare the body and reduce injury risk.
Set	Q	Answer	Explanation
A3	9	D	Agility is the ability to move quickly and change direction.
A3	10	C	Analysis guides improvement.
A3	11	B	Sportsmanship includes fairness and respect.
A3	12	A	Warm-ups prepare the body and reduce injury risk.
A4	1	D	Agility is the ability to move quickly and change direction.
A4	2	C	Analysis guides improvement.
A4	3	B	Sportsmanship includes fairness and respect.
A4	4	A	Warm-ups prepare the body and reduce injury risk.
A4	5	D	Agility is the ability to move quickly and change direction.
A4	6	C	Analysis guides improvement.
A4	7	B	Sportsmanship includes fairness and respect.
A4	8	A	Warm-ups prepare the body and reduce injury risk.
A4	9	D	Agility is the ability to move quickly and change direction.
A4	10	C	Analysis guides improvement.
A4	11	B	Sportsmanship includes fairness and respect.

Set	Q	Answer	Explanation
A4	12	A	Warm-ups prepare the body and reduce injury risk.

Beacon answers should be marked for accuracy, vocabulary, reasoning and clarity. Accept any answer that is logically correct and uses the subject concept precisely.

Chapter 12: Creative Writing Masterclass - Discovery-Style Hard Practice

This chapter trains high-control creative responses: picture prompts, object prompts, poems, problem-solution tasks, persuasive imagination and short story writing. It is designed for students who need exam discipline, not random long stories.

Creative vocabulary with usage

Word	Meaning	Where to use
ominous	suggesting danger	Use before something bad happens.
tranquil	peaceful	Use to create calm before contrast.
desolate	empty and lonely	Use for abandoned places.
vibrant	bright and full of life	Use for fairs, markets, celebrations.
concealed	hidden	Use for clues, doors or secrets.
faint	weak or barely noticeable	Use for sound or light.
jagged	sharp and uneven	Use for rocks, broken glass or edges.
radiant	glowing brightly	Use for happiness or light.
sombre	serious and sad	Use for sadness or ceremony.
restless	unable to settle	Use for nervous characters or wind.
Word	Meaning	Where to use
menacing	threatening	Use for villains, shadows or storms.
soothing	calming	Use for safe and peaceful moments.
beckoned	signalled to come closer	Use in mystery or fantasy.
lingered	stayed longer than expected	Use for smells, thoughts or sounds.
shuddered	shook from fear or cold	Use body reaction.
glimmered	shone faintly	Use in dark scenes.
murmured	spoke softly	Use for low voices.
echoed	repeated sound	Use in halls/caves/empty places.
hesitated	paused because unsure	Use before decisions.
surged	moved suddenly and strongly	Use for emotion or crowds.
Word	Meaning	Where to use
stifling	hot and hard to breathe	Use for uncomfortable rooms.
brittle	hard but easily broken	Use for old objects or dry branches.
weathered	worn by age/weather	Use for doors, stones, faces.
startled	suddenly shocked	Use for surprise.
fragile	easily broken	Use for objects or emotions.
uneasy	not comfortable	Use when something feels wrong.
piercing	sharp and intense	Use for sounds, cold or eyes.
distant	far away	Use for sounds/lights/memories.
flickered	shone unsteadily	Use for candles, lights, screens.
blurred	not clear	Use for vision, rain or memory.

Creative Sentence Bank - Fear

1. My heart hammered against my ribs.
2. A chill crawled down my spine.
3. The silence pressed against me.
4. My fingers tightened around the handle.
5. I wanted to run, but my feet refused to move.
6. A cold feeling settled in my stomach.
7. Every shadow seemed to stretch towards me.
8. My breath caught in my throat.
9. The air felt heavy and wrong.
10. I knew, without knowing how, that I was not alone.

Creative Sentence Bank - Curiosity

1. Questions crowded my mind.
2. I leaned closer despite myself.
3. The object did not belong there.
4. I should have walked away, but I could not.
5. The tiny clue pulled me forward.
6. I studied the symbol carefully.
7. Every detail made the mystery deeper.
8. My eyes fixed on the impossible mark.
9. I wondered who had left it behind.
10. Curiosity was stronger than caution.

Creative Sentence Bank - Excitement

1. Energy rushed through me.
2. I could hardly stay still.
3. The air buzzed with promise.
4. A grin spread across my face.
5. My heart raced, but not from fear.
6. Everything seemed brighter than before.
7. The crowd's cheers lifted around me.
8. I moved forward eagerly.
9. For a moment, anything felt possible.
10. The whole scene seemed alive.

Creative Sentence Bank - Atmosphere

1. Rain tapped the window like impatient fingers.
2. Fog curled around my ankles.
3. Streetlights glowed like tiny moons.
4. The corridor stretched ahead, silent and narrow.
5. The room smelled of dust and forgotten books.
6. A weak light glimmered beneath the door.
7. The wind tugged at my sleeves.
8. Sunlight spilled across the grass.
9. The old house stood silent and watchful.
10. The air changed the moment I stepped inside.

Picture Prompt Method

- Describe visible details first.
- Add mood using weather, light and sound.
- Invent a hidden problem suggested by the image.
- Create one character decision.
- End with either resolution or controlled mystery.

Practice

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Object Prompt Method

- Observe shape, colour, texture and weight.
- Ask who owns the object and why it matters.
- Turn the object into a clue, tool, gift or warning.
- Use personification if appropriate.
- End by changing how the reader sees the object.

Practice

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Poem Method

- Choose a clear subject.
- Use short lines and repeated patterns.
- Use imagery and comparison.
- Focus on one feeling or idea.
- End with a memorable final image.

Practice

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Story Control Method

- Use 4-6 paragraphs.
- Do not add too many characters.
- Build tension before the main event.
- Use sensory details.
- Make the ending logical.

Practice

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

Notes / writing: _____

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Notes / writing: _____

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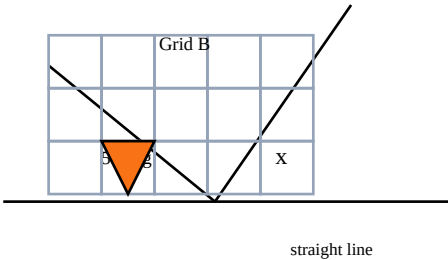
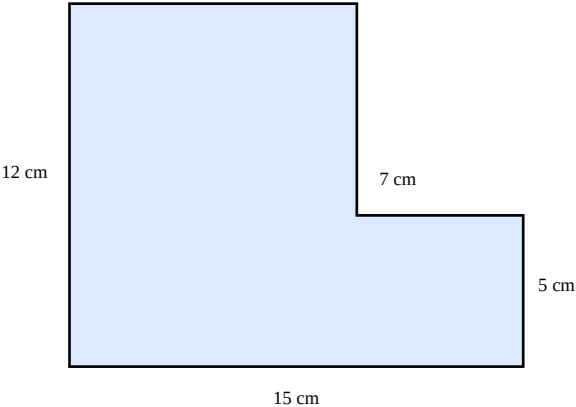
Notes / writing: _____

Notes / writing: _____

Picture Prompt 1: The Door

Geometry stimulus: composite area, transformations and angles

Composite Shape A



Task: Write a story about a door that appears where there should only be a wall.

Plan

Plan: _____

Plan: _____

Plan: _____

Plan: _____

Plan: _____

Plan: _____

Plan: _____

Plan: _____

Write

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

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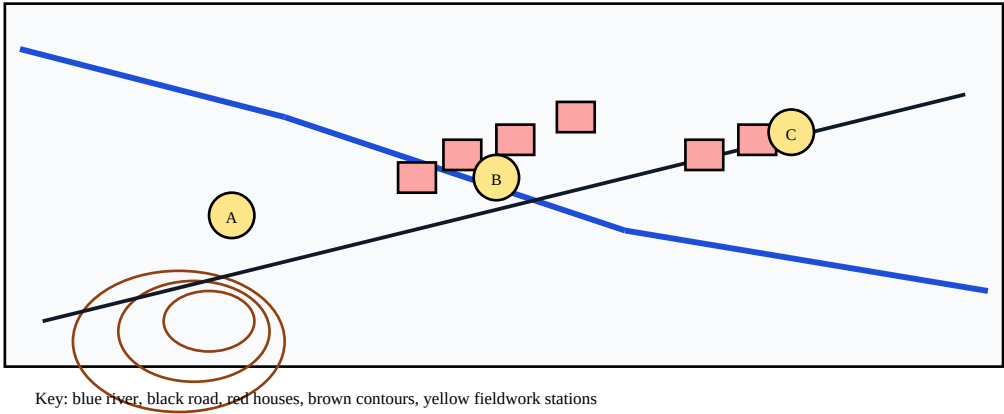
Line: _____

Line: _____

Line: _____

Picture Prompt 2: The Map

Geography stimulus: flood-risk village map



Task: Write a story where a map shows something that has not happened yet.

Plan

Plan: _____

Plan: _____

Plan: _____

Plan: _____

Plan: _____

Plan: _____

Plan: _____

Plan: _____

Write

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

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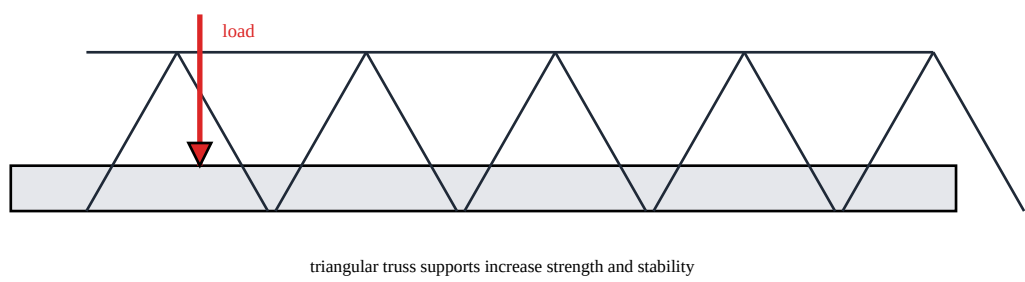
Line: _____

Line: _____

Line: _____

Object Prompt: The Pen

D&T stimulus: bridge prototype with forces and supports



Task: Write a poem about the pen in your hand using all five senses.

Plan

Plan: _____

Plan: _____

Plan: _____

Plan: _____

Plan: _____

Plan: _____

Plan: _____

Write

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Line: _____

Creative Response Practice Page 1

1. The world is now silent. Describe one problem and one solution.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

2. What else could a chair be used for? Give two imaginative ideas and persuade us.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

3. A dragon lands on the school roof. What do you do?

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

4. Write a story ending with: the same mark was glowing on my hand.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

5. Describe the same park twice: first peaceful, then frightening.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

6. Write instructions for using a strange metal object.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

7. Write a poem about a clock that refuses to move.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

8. You find a message inside a desk. Continue the story.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

Creative Response Practice Page 2

1. The world is now silent. Describe one problem and one solution.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

2. What else could a chair be used for? Give two imaginative ideas and persuade us.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

3. A dragon lands on the school roof. What do you do?

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

4. Write a story ending with: the same mark was glowing on my hand.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

5. Describe the same park twice: first peaceful, then frightening.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

6. Write instructions for using a strange metal object.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

7. Write a poem about a clock that refuses to move.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

8. You find a message inside a desk. Continue the story.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

Creative Response Practice Page 3

1. The world is now silent. Describe one problem and one solution.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

2. What else could a chair be used for? Give two imaginative ideas and persuade us.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

3. A dragon lands on the school roof. What do you do?

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

4. Write a story ending with: the same mark was glowing on my hand.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

5. Describe the same park twice: first peaceful, then frightening.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

6. Write instructions for using a strange metal object.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

7. Write a poem about a clock that refuses to move.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

8. You find a message inside a desk. Continue the story.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

Creative Response Practice Page 4

1. The world is now silent. Describe one problem and one solution.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

2. What else could a chair be used for? Give two imaginative ideas and persuade us.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

3. A dragon lands on the school roof. What do you do?

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

4. Write a story ending with: the same mark was glowing on my hand.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

5. Describe the same park twice: first peaceful, then frightening.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

6. Write instructions for using a strange metal object.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

7. Write a poem about a clock that refuses to move.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

8. You find a message inside a desk. Continue the story.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

Creative Response Practice Page 5

1. The world is now silent. Describe one problem and one solution.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

2. What else could a chair be used for? Give two imaginative ideas and persuade us.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

3. A dragon lands on the school roof. What do you do?

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

4. Write a story ending with: the same mark was glowing on my hand.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

5. Describe the same park twice: first peaceful, then frightening.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

6. Write instructions for using a strange metal object.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

7. Write a poem about a clock that refuses to move.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

8. You find a message inside a desk. Continue the story.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

Creative Response Practice Page 6

1. The world is now silent. Describe one problem and one solution.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

2. What else could a chair be used for? Give two imaginative ideas and persuade us.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

3. A dragon lands on the school roof. What do you do?

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

4. Write a story ending with: the same mark was glowing on my hand.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

5. Describe the same park twice: first peaceful, then frightening.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

6. Write instructions for using a strange metal object.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

7. Write a poem about a clock that refuses to move.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

8. You find a message inside a desk. Continue the story.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

Creative Response Practice Page 7

1. The world is now silent. Describe one problem and one solution.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

2. What else could a chair be used for? Give two imaginative ideas and persuade us.

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

3. A dragon lands on the school roof. What do you do?

Plan/answer: _____

Plan/answer: _____

Plan/answer: _____

4. Write a story ending with: the same mark was glowing on my hand.

Plan/answer: _____

Plan/answer: _____

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8. You find a message inside a desk. Continue the story.

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Creative Response Practice Page 8

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Creative Response Practice Page 10

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Chapter 13: Full Mixed Hard Mock Papers

These papers combine all subject areas. Use timed conditions. Mark carefully and use the correction log.

Hard Mixed Mock Paper 1 - 66 Questions

Suggested time: 60-70 minutes. Questions rotate across all subjects and include visual reasoning, subject vocabulary and elimination.

Q1. English. A writer describes a character as 'carefully folding the same letter again and again'. What can be inferred?

- A. The letter is definitely a shopping list.
- B. The character cannot read.
- C. The letter is emotionally important or worrying.
- D. The character enjoys origami only.

Q2. English. Which opening is strongest for a controlled mystery?

- A. There was a book.
- B. At first the library seemed ordinary, until one book whispered my name.
- C. I went to a place and something happened.
- D. It was a day.

Q3. English. Which sentence most effectively builds suspense through contrast?

- A. The playground was bright and noisy, but the shed behind it stood silent.
- B. The playground was bright and noisy and fun.
- C. The shed was old and brown.
- D. I went to the playground.

Q4. English. Which phrase best shows fear without naming it?

- A. I was very scared.
- B. It was scary.
- C. I did not like it.
- D. My fingers tightened around the handle as my breath caught.

Q5. Mathematics. The mean of six numbers is 18. Five numbers total 82. What is the missing number?

- A. 24
- B. 28
- C. 26
- D. 18

Q6. Mathematics. A prism has cross-section area 18 cm squared and length 7 cm. What is the volume?

- A. 98 cm cubed
- B. 126 cm cubed
- C. 25 cm cubed
- D. 63 cm cubed

Q7. Mathematics. A rectangle is enlarged by scale factor 4. Its original area is 12 cm squared. What is the enlarged area?

- A. 192 cm squared
- B. 48 cm squared
- C. 96 cm squared
- D. 64 cm squared

Q8. Mathematics. A triangle has angles in the ratio 3:4:5. What is the smallest angle?

- A. 60 degrees
- B. 75 degrees
- C. 36 degrees
- D. 45 degrees

Q9. Science. Which material property matters most for saucepan handles?

- A. Magnetism only
- B. Solubility

- C. Thermal insulation
- D. Transparency

Q10. Science. A plant near a window grows towards light. Which process helps explain why light matters?

- A. Condensation
- B. Photosynthesis
- C. Evaporation
- D. Friction

Q11. Science. A pupil tests how ramp height affects toy car distance. Which is the independent variable?

- A. Ramp height
- B. Distance travelled
- C. Toy car colour
- D. Results table

Q12. Science. Which conclusion is best supported by repeat readings that are close together?

- A. The experiment has no variables.
- B. The hypothesis must be false.
- C. The equipment was decorative.
- D. The results are likely to be reliable.

Q13. Computing. A robot repeats [move 3, turn right] four times. What is the likely route?

- A. A triangle
- B. No route
- C. A square-like route
- D. A straight line only

Q14. Computing. Which bug is most likely if valid pupils are rejected by a booking system?

- A. The database has names
- B. The true/false branch is reversed
- C. The font is too small
- D. The output is colourful

Q15. Computing. A program uses IF score $\geq$ 80 THEN certificate = 'Gold'. A pupil scores 80. What happens?

- A. Gold certificate is awarded
- B. No certificate is awarded
- C. The score becomes 79
- D. The program must loop forever

Q16. Computing. A database query asks for Year 6 AND Music Club. Which record matches?

- A. Year 5 pupil in Music Club
- B. Year 6 pupil in Football Club
- C. Any Music Club pupil
- D. Year 6 pupil in Music Club

Q17. Geography. Why collect data at morning and afternoon rush hour?

- A. Rivers reverse every day
- B. Questionnaires need no sample
- C. Traffic and noise vary by time
- D. Maps stop working at noon

Q18. Geography. Which conclusion is strongest?

- A. I disliked the traffic.
- B. Noise readings were highest near station C during rush hour.
- C. The village felt bad.
- D. Roads are always noisy.

Q19. Geography. A fieldwork sample only asks people living far from the road. What is the main weakness?

- A. Sample bias
- B. Too much reliability
- C. No human geography
- D. No physical feature

Q20. Geography. Which pair best combines human and physical geography?

- A. A poem and a painting
- B. A triangle and a prism
- C. A melody and tempo
- D. Road traffic affecting riverside homes

Q21. History. Which is a consequence rather than a cause?

- A. Wooden houses were close together
- B. A candle was left burning
- C. The city rebuilt wider streets after the fire
- D. The weather was dry

Q22. History. What does corroboration mean?

- A. Ignoring disagreement
- B. Checking one source against another
- C. Making a source longer
- D. Drawing the source

Q23. History. Which source is usually strongest for what someone saw during an event?

- A. A diary written at the time
- B. A modern unsupported blog
- C. A fictional story
- D. A cartoon made later

Q24. History. Why can two historians interpret the same event differently?

- A. Dates change every year
- B. One must be lying
- C. History has no sources
- D. They may use different evidence or viewpoints

Q25. Languages. Which change is most likely when moving from singular to plural?

- A. The sentence must become past tense
- B. The accent always disappears
- C. The word may gain an ending or change form
- D. The word becomes a question

Q26. Languages. What helps most when translating an unknown phrase?

- A. Changing all nouns into verbs
- B. Context clues and word patterns
- C. Guessing the longest word
- D. Ignoring punctuation

Q27. Languages. In a made-up language, 'bon-lun' means 12 and 'bon-mit' means 13. If 'lun' is 2 and 'mit' is 3, what does 'bon' likely mean?

- A. ten
- B. one
- C. twenty
- D. and

Q28. Languages. Why are cognates useful but not always safe?

- A. They never help
- B. They are always numbers

- C. They remove grammar
- D. Some similar-looking words can be false friends

Q29. Art & Design. A repeated leaf shape across a border is a...

- A. tributary
- B. crotchet
- C. motif/pattern
- D. variable

Q30. Art & Design. Why might an artist use asymmetry?

- A. To conduct heat
- B. To create visual interest or tension
- C. To make both sides identical
- D. To measure volume

Q31. Art & Design. Which design choice makes a warning poster easiest to read?

- A. Strong contrast and clear focal point
- B. Tiny pale text on white
- C. Many overlapping patterns
- D. No hierarchy

Q32. Art & Design. What does one-point perspective mainly create?

- A. Louder sound
- B. Faster running
- C. Electrical flow
- D. Depth and distance

Q33. Design & Technology. Why test a prototype with the intended user?

- A. To change the subject
- B. To make the prototype official
- C. To check if it meets real user needs
- D. To avoid evaluation

Q34. Design & Technology. What is the difference between aesthetics and function?

- A. Aesthetics means strength only
- B. Aesthetics is appearance; function is what it does
- C. Both mean colour only
- D. Function means history

Q35. Design & Technology. A bridge prototype bends under load. Which improvement is most structural?

- A. Add triangular bracing
- B. Change the colour
- C. Make the label bigger
- D. Remove testing

Q36. Design & Technology. Which is a design criterion for a school water bottle?

- A. It should be mysterious
- B. It must play music
- C. It should be historically reliable
- D. It must not leak when carried in a bag

Q37. Music. Which describes timbre?

- A. The number of pages
- B. The historical date
- C. The unique quality or colour of a sound
- D. The speed of music

Q38. Music. Why might a composer use soft dynamics before a sudden loud chord?

- A. To change PE technique
- B. To create surprise and tension
- C. To make the piece silent forever
- D. To remove rhythm

Q39. Music. Which change is most likely to make a cheerful song sound sadder?

- A. Major to minor key
- B. Make it longer only
- C. Change the paper colour
- D. Remove all rhythm

Q40. Music. A piece gradually becomes louder towards the climax. What is this?

- A. Diminuendo
- B. Rest
- C. Tempo
- D. Crescendo

Q41. Physical Education. Why is technique analysis useful after a performance?

- A. It measures rainfall
- B. It changes the score automatically
- C. It identifies specific improvements
- D. It removes the need to practise

Q42. Physical Education. Which is the best example of sportsmanship?

- A. Ignoring team-mates
- B. Accepting a referee's decision respectfully
- C. Arguing after every decision
- D. Hiding the rules

Q43. Physical Education. Why is a warm-up useful before sprinting?

- A. It prepares muscles and raises pulse gradually
- B. It replaces training
- C. It lowers coordination
- D. It makes rules unnecessary

Q44. Physical Education. Which factor most improves quick changes of direction?

- A. Perspective
- B. Crescendo
- C. Chronology
- D. Agility

Short Written Section

Q45. English. Explain why contrast can create suspense in a story opening.

Answer: _____

Q46. Mathematics. A shape is enlarged by scale factor 3. Explain why the area scale factor is not 3.

Answer: _____

Q47. Science. Explain why repeat readings can improve reliability.

Answer: _____

Q48. Computing. Explain why AND gives fewer database results than OR.

Answer: _____

Q49. Geography. Explain why sample bias weakens a questionnaire.

Answer: _____

Q50. History. Explain the difference between cause and consequence.

Answer: _____

Q51. Languages. Give one example of a false friend and explain the risk.

Answer: _____

Q52. Art & Design. Describe how perspective creates depth.

Answer: _____

Q53. Design & Technology. Write three design criteria for a reusable lunchbox.

Answer: _____

Q54. Music. Describe the effect of a crescendo before a climax.

Answer: _____

Q55. Physical Education. Describe how agility helps in football or netball.

Answer: _____

Hard Mixed Mock Paper 1 Answers

Q	Subject	Answer / guidance
1	English	C - Repetition of careful action suggests concern or importance.
2	English	B - Normal setting plus impossible detail creates mystery.
3	English	A - The contrast between noise and silence creates tension.
4	English	D - Body reaction shows emotion indirectly.
5	Mathematics	C - Total must be 108; $108-82=26$.
6	Mathematics	B - Volume = cross-section area x length.
7	Mathematics	A - Area increases by scale factor squared: 4 squared = 16; $12 \times 16 = 192$.
8	Mathematics	D - $3+4+5=12$ parts; $180/12=15$; smallest= $3 \times 15=45$.
9	Science	C - Handles should not conduct heat easily.
10	Science	B - Plants use light for photosynthesis.
11	Science	A - The independent variable is the one changed deliberately.
12	Science	D - Close repeat readings suggest reliability.
13	Computing	C - Four right turns can form a square path.
14	Computing	B - A reversed condition sends correct users the wrong way.
15	Computing	A - $\geq$ includes equality.
16	Computing	D - AND requires both conditions.
17	Geography	C - Time affects traffic volume and noise.
18	Geography	B - It uses evidence, location and timing.
19	Geography	A - The sample does not represent affected residents.
20	Geography	D - Road traffic is human; river/homes place context includes physical/human interaction.
21	History	C - Rebuilding is an effect after the event.
22	History	B - Corroboration uses multiple sources.
23	History	A - A diary from the time is closer evidence.
24	History	D - Interpretation depends on evidence and perspective.

Q	Subject	Answer / guidance
25	Languages	C - Plural forms often change endings/forms.
26	Languages	B - Context helps meaning.
27	Languages	A - $12 = \text{ten} + 2$; $13 = \text{ten} + 3$.
28	Languages	D - Cognates can mislead if meanings differ.
29	Art & Design	C - A motif repeats within a pattern.
30	Art & Design	B - Asymmetry can feel dynamic.
31	Art & Design	A - Contrast and focal point improve readability.
32	Art & Design	D - Perspective creates the illusion of depth.
33	Design & Technology	C - User testing gives relevant feedback.
34	Design & Technology	B - Design must consider both look and purpose.
35	Design & Technology	A - Triangulation strengthens structures.
36	Design & Technology	D - A criterion states a measurable requirement.
37	Music	C - Timbre identifies sound quality.
38	Music	B - Contrast in dynamics can create impact.
39	Music	A - Minor keys often create a sadder mood.
40	Music	D - Crescendo means getting louder.
41	Physical Education	C - Analysis guides improvement.
42	Physical Education	B - Sportsmanship includes fairness and respect.
43	Physical Education	A - Warm-ups prepare the body and reduce injury risk.
44	Physical Education	D - Agility is the ability to move quickly and change direction.
45	English	Check for precise vocabulary, logical explanation and correct subject concept.
46	Mathematics	Check for precise vocabulary, logical explanation and correct subject concept.
47	Science	Check for precise vocabulary, logical explanation and correct subject concept.
48	Computing	Check for precise vocabulary, logical explanation and correct subject concept.

Q	Subject	Answer / guidance
49	Geography	Check for precise vocabulary, logical explanation and correct subject concept.

Q	Subject	Answer / guidance
50	History	Check for precise vocabulary, logical explanation and correct subject concept.
51	Languages	Check for precise vocabulary, logical explanation and correct subject concept.
52	Art & Design	Check for precise vocabulary, logical explanation and correct subject concept.
53	Design & Technology	Check for precise vocabulary, logical explanation and correct subject concept.
54	Music	Check for precise vocabulary, logical explanation and correct subject concept.
55	Physical Education	Check for precise vocabulary, logical explanation and correct subject concept.

Hard Mixed Mock Paper 2 - 66 Questions

Suggested time: 60-70 minutes. Questions rotate across all subjects and include visual reasoning, subject vocabulary and elimination.

Q1. English. Which sentence most effectively builds suspense through contrast?

- A. The playground was bright and noisy, but the shed behind it stood silent.
- B. The playground was bright and noisy and fun.
- C. The shed was old and brown.
- D. I went to the playground.

Q2. English. Which phrase best shows fear without naming it?

- A. I was very scared.
- B. It was scary.
- C. I did not like it.
- D. My fingers tightened around the handle as my breath caught.

Q3. English. A writer describes a character as 'carefully folding the same letter again and again'. What can be inferred?

- A. The letter is definitely a shopping list.
- B. The character cannot read.
- C. The letter is emotionally important or worrying.
- D. The character enjoys origami only.

Q4. English. Which opening is strongest for a controlled mystery?

- A. There was a book.
- B. At first the library seemed ordinary, until one book whispered my name.
- C. I went to a place and something happened.
- D. It was a day.

Q5. Mathematics. A rectangle is enlarged by scale factor 4. Its original area is 12 cm squared. What is the enlarged area?

- A. 192 cm squared
- B. 48 cm squared
- C. 96 cm squared
- D. 64 cm squared

Q6. Mathematics. A triangle has angles in the ratio 3:4:5. What is the smallest angle?

- A. 60 degrees
- B. 75 degrees
- C. 36 degrees
- D. 45 degrees

Q7. Mathematics. The mean of six numbers is 18. Five numbers total 82. What is the missing number?

- A. 24
- B. 28
- C. 26
- D. 18

Q8. Mathematics. A prism has cross-section area 18 cm squared and length 7 cm. What is the volume?

- A. 98 cm cubed
- B. 126 cm cubed
- C. 25 cm cubed
- D. 63 cm cubed

Q9. Science. A pupil tests how ramp height affects toy car distance. Which is the independent variable?

- A. Ramp height
- B. Distance travelled
- C. Toy car colour
- D. Results table

Q10. Science. Which conclusion is best supported by repeat readings that are close together?

- A. The experiment has no variables.
- B. The hypothesis must be false.
- C. The equipment was decorative.
- D. The results are likely to be reliable.

Q11. Science. Which material property matters most for saucepan handles?

- A. Magnetism only
- B. Solubility
- C. Thermal insulation
- D. Transparency

Q12. Science. A plant near a window grows towards light. Which process helps explain why light matters?

- A. Condensation
- B. Photosynthesis
- C. Evaporation
- D. Friction

Q13. Computing. A program uses IF score $\geq$ 80 THEN certificate = 'Gold'. A pupil scores 80. What happens?

- A. Gold certificate is awarded
- B. No certificate is awarded
- C. The score becomes 79
- D. The program must loop forever

Q14. Computing. A database query asks for Year 6 AND Music Club. Which record matches?

- A. Year 5 pupil in Music Club
- B. Year 6 pupil in Football Club
- C. Any Music Club pupil
- D. Year 6 pupil in Music Club

Q15. Computing. A robot repeats [move 3, turn right] four times. What is the likely route?

- A. A triangle
- B. No route
- C. A square-like route
- D. A straight line only

Q16. Computing. Which bug is most likely if valid pupils are rejected by a booking system?

- A. The database has names
- B. The true/false branch is reversed
- C. The font is too small
- D. The output is colourful

Q17. Geography. A fieldwork sample only asks people living far from the road. What is the main weakness?

- A. Sample bias
- B. Too much reliability
- C. No human geography
- D. No physical feature

Q18. Geography. Which pair best combines human and physical geography?

- A. A poem and a painting
- B. A triangle and a prism
- C. A melody and tempo
- D. Road traffic affecting riverside homes

Q19. Geography. Why collect data at morning and afternoon rush hour?

- A. Rivers reverse every day
- B. Questionnaires need no sample

- C. Traffic and noise vary by time
- D. Maps stop working at noon

Q20. Geography. Which conclusion is strongest?

- A. I disliked the traffic.
- B. Noise readings were highest near station C during rush hour.
- C. The village felt bad.
- D. Roads are always noisy.

Q21. History. Which source is usually strongest for what someone saw during an event?

- A. A diary written at the time
- B. A modern unsupported blog
- C. A fictional story
- D. A cartoon made later

Q22. History. Why can two historians interpret the same event differently?

- A. Dates change every year
- B. One must be lying
- C. History has no sources
- D. They may use different evidence or viewpoints

Q23. History. Which is a consequence rather than a cause?

- A. Wooden houses were close together
- B. A candle was left burning
- C. The city rebuilt wider streets after the fire
- D. The weather was dry

Q24. History. What does corroboration mean?

- A. Ignoring disagreement
- B. Checking one source against another
- C. Making a source longer
- D. Drawing the source

Q25. Languages. In a made-up language, 'bon-lun' means 12 and 'bon-mit' means 13. If 'lun' is 2 and 'mit' is 3, what does 'bon' likely mean?

- A. ten
- B. one
- C. twenty
- D. and

Q26. Languages. Why are cognates useful but not always safe?

- A. They never help
- B. They are always numbers
- C. They remove grammar
- D. Some similar-looking words can be false friends

Q27. Languages. Which change is most likely when moving from singular to plural?

- A. The sentence must become past tense
- B. The accent always disappears
- C. The word may gain an ending or change form
- D. The word becomes a question

Q28. Languages. What helps most when translating an unknown phrase?

- A. Changing all nouns into verbs
- B. Context clues and word patterns
- C. Guessing the longest word
- D. Ignoring punctuation

Q29. Art & Design. Which design choice makes a warning poster easiest to read?

- A. Strong contrast and clear focal point
- B. Tiny pale text on white
- C. Many overlapping patterns
- D. No hierarchy

Q30. Art & Design. What does one-point perspective mainly create?

- A. Louder sound
- B. Faster running
- C. Electrical flow
- D. Depth and distance

Q31. Art & Design. A repeated leaf shape across a border is a...

- A. tributary
- B. crotchet
- C. motif/pattern
- D. variable

Q32. Art & Design. Why might an artist use asymmetry?

- A. To conduct heat
- B. To create visual interest or tension
- C. To make both sides identical
- D. To measure volume

Q33. Design & Technology. A bridge prototype bends under load. Which improvement is most structural?

- A. Add triangular bracing
- B. Change the colour
- C. Make the label bigger
- D. Remove testing

Q34. Design & Technology. Which is a design criterion for a school water bottle?

- A. It should be mysterious
- B. It must play music
- C. It should be historically reliable
- D. It must not leak when carried in a bag

Q35. Design & Technology. Why test a prototype with the intended user?

- A. To change the subject
- B. To make the prototype official
- C. To check if it meets real user needs
- D. To avoid evaluation

Q36. Design & Technology. What is the difference between aesthetics and function?

- A. Aesthetics means strength only
- B. Aesthetics is appearance; function is what it does
- C. Both mean colour only
- D. Function means history

Q37. Music. Which change is most likely to make a cheerful song sound sadder?

- A. Major to minor key
- B. Make it longer only
- C. Change the paper colour
- D. Remove all rhythm

Q38. Music. A piece gradually becomes louder towards the climax. What is this?

- A. Diminuendo
- B. Rest

- C. Tempo
- D. Crescendo

Q39. Music. Which describes timbre?

- A. The number of pages
- B. The historical date
- C. The unique quality or colour of a sound
- D. The speed of music

Q40. Music. Why might a composer use soft dynamics before a sudden loud chord?

- A. To change PE technique
- B. To create surprise and tension
- C. To make the piece silent forever
- D. To remove rhythm

Q41. Physical Education. Why is a warm-up useful before sprinting?

- A. It prepares muscles and raises pulse gradually
- B. It replaces training
- C. It lowers coordination
- D. It makes rules unnecessary

Q42. Physical Education. Which factor most improves quick changes of direction?

- A. Perspective
- B. Crescendo
- C. Chronology
- D. Agility

Q43. Physical Education. Why is technique analysis useful after a performance?

- A. It measures rainfall
- B. It changes the score automatically
- C. It identifies specific improvements
- D. It removes the need to practise

Q44. Physical Education. Which is the best example of sportsmanship?

- A. Ignoring team-mates
- B. Accepting a referee's decision respectfully
- C. Arguing after every decision
- D. Hiding the rules

Short Written Section

Q45. English. Write one inference from: 'Amira folded the note twice before hiding it.'

Answer: _____

Q46. Mathematics. Find a missing number when the mean of six numbers is 14 and five numbers total 71.

Answer: _____

Q47. Science. Describe one fair test for comparing thermal conductors.

Answer: _____

Q48. Computing. Describe one possible bug in a booking-system flowchart.

Answer: _____

Q49. Geography. Describe how contour lines can show steep land.

Answer: _____

Q50. History. Write a historical enquiry question about a local event.

Answer: _____

Q51. Languages. Explain why word order matters in translation.

Answer: _____

Q52. Art & Design. Explain the difference between abstract and figurative art.

Answer: _____

Q53. Design & Technology. Describe one user need and one material property for a phone stand.

Answer: _____

Q54. Music. Compare major and minor key in terms of mood.

Answer: _____

Q55. Physical Education. Explain how pulse rate can show exercise intensity.

Answer: _____

Hard Mixed Mock Paper 2 Answers

Q	Subject	Answer / guidance
1	English	A - The contrast between noise and silence creates tension.
2	English	D - Body reaction shows emotion indirectly.
3	English	C - Repetition of careful action suggests concern or importance.
4	English	B - Normal setting plus impossible detail creates mystery.
5	Mathematics	A - Area increases by scale factor squared: 4 squared = 16; $12 \times 16 = 192$.
6	Mathematics	D - $3+4+5=12$ parts; $180/12=15$; smallest= $3 \times 15=45$.
7	Mathematics	C - Total must be 108; $108-82=26$.
8	Mathematics	B - Volume = cross-section area x length.
9	Science	A - The independent variable is the one changed deliberately.
10	Science	D - Close repeat readings suggest reliability.
11	Science	C - Handles should not conduct heat easily.
12	Science	B - Plants use light for photosynthesis.
13	Computing	A - $\geq$ includes equality.
14	Computing	D - AND requires both conditions.
15	Computing	C - Four right turns can form a square path.
16	Computing	B - A reversed condition sends correct users the wrong way.
17	Geography	A - The sample does not represent affected residents.
18	Geography	D - Road traffic is human; river/homes place context includes physical/human interaction.
19	Geography	C - Time affects traffic volume and noise.
20	Geography	B - It uses evidence, location and timing.
21	History	A - A diary from the time is closer evidence.
22	History	D - Interpretation depends on evidence and perspective.
23	History	C - Rebuilding is an effect after the event.
24	History	B - Corroboration uses multiple sources.
Q	Subject	Answer / guidance
25	Languages	A - $12 = \text{ten} + 2$; $13 = \text{ten} + 3$.
26	Languages	D - Cognates can mislead if meanings differ.
27	Languages	C - Plural forms often change endings/forms.
28	Languages	B - Context helps meaning.
29	Art & Design	A - Contrast and focal point improve readability.
30	Art & Design	D - Perspective creates the illusion of depth.
31	Art & Design	C - A motif repeats within a pattern.
32	Art & Design	B - Asymmetry can feel dynamic.
33	Design & Technology	A - Triangulation strengthens structures.
34	Design & Technology	D - A criterion states a measurable requirement.
35	Design & Technology	C - User testing gives relevant feedback.
36	Design & Technology	B - Design must consider both look and purpose.
37	Music	A - Minor keys often create a sadder mood.
38	Music	D - Crescendo means getting louder.
39	Music	C - Timbre identifies sound quality.
40	Music	B - Contrast in dynamics can create impact.
41	Physical Education	A - Warm-ups prepare the body and reduce injury risk.
42	Physical Education	D - Agility is the ability to move quickly and change direction.
43	Physical Education	C - Analysis guides improvement.
44	Physical Education	B - Sportsmanship includes fairness and respect.
45	English	Check for precise vocabulary, logical explanation and correct subject concept.
46	Mathematics	Check for precise vocabulary, logical explanation and correct subject concept.
47	Science	Check for precise vocabulary, logical explanation and correct subject concept.
48	Computing	Check for precise vocabulary, logical explanation and correct subject concept.
Q	Subject	Answer / guidance
49	Geography	Check for precise vocabulary, logical explanation and correct subject concept.

Q	Subject	Answer / guidance
50	History	Check for precise vocabulary, logical explanation and correct subject concept.
51	Languages	Check for precise vocabulary, logical explanation and correct subject concept.
52	Art & Design	Check for precise vocabulary, logical explanation and correct subject concept.
53	Design & Technology	Check for precise vocabulary, logical explanation and correct subject concept.
54	Music	Check for precise vocabulary, logical explanation and correct subject concept.
55	Physical Education	Check for precise vocabulary, logical explanation and correct subject concept.

Hard Mixed Mock Paper 3 - 66 Questions

Suggested time: 60-70 minutes. Questions rotate across all subjects and include visual reasoning, subject vocabulary and elimination.

Q1. English. A writer describes a character as 'carefully folding the same letter again and again'. What can be inferred?

- A. The letter is definitely a shopping list.
- B. The character cannot read.
- C. The letter is emotionally important or worrying.
- D. The character enjoys origami only.

Q2. English. Which opening is strongest for a controlled mystery?

- A. There was a book.
- B. At first the library seemed ordinary, until one book whispered my name.
- C. I went to a place and something happened.
- D. It was a day.

Q3. English. Which sentence most effectively builds suspense through contrast?

- A. The playground was bright and noisy, but the shed behind it stood silent.
- B. The playground was bright and noisy and fun.
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Q4. English. Which phrase best shows fear without naming it?

- A. I was very scared.
- B. It was scary.
- C. I did not like it.
- D. My fingers tightened around the handle as my breath caught.

Q5. Mathematics. The mean of six numbers is 18. Five numbers total 82. What is the missing number?

- A. 24
- B. 28
- C. 26
- D. 18

Q6. Mathematics. A prism has cross-section area 18 cm squared and length 7 cm. What is the volume?

- A. 98 cm cubed
- B. 126 cm cubed
- C. 25 cm cubed
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Q7. Mathematics. A rectangle is enlarged by scale factor 4. Its original area is 12 cm squared. What is the enlarged area?

- A. 192 cm squared
- B. 48 cm squared
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Q8. Mathematics. A triangle has angles in the ratio 3:4:5. What is the smallest angle?

- A. 60 degrees
- B. 75 degrees
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Q9. Science. Which material property matters most for saucepan handles?

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Q10. Science. A plant near a window grows towards light. Which process helps explain why light matters?

- A. Condensation
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- A. Ramp height
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Q12. Science. Which conclusion is best supported by repeat readings that are close together?

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- C. The equipment was decorative.
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- A. A triangle
- B. No route
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- D. A straight line only

Q14. Computing. Which bug is most likely if valid pupils are rejected by a booking system?

- A. The database has names
- B. The true/false branch is reversed
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Q15. Computing. A program uses IF score $\geq$ 80 THEN certificate = 'Gold'. A pupil scores 80. What happens?

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Q16. Computing. A database query asks for Year 6 AND Music Club. Which record matches?

- A. Year 5 pupil in Music Club
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Q25. Languages. Which change is most likely when moving from singular to plural?

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- B. one
- C. twenty
- D. and

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- A. tributary
- B. crotchet
- C. motif/pattern
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- A. To conduct heat
- B. To create visual interest or tension
- C. To make both sides identical
- D. To measure volume

Q31. Art & Design. Which design choice makes a warning poster easiest to read?

- A. Strong contrast and clear focal point
- B. Tiny pale text on white
- C. Many overlapping patterns
- D. No hierarchy

Q32. Art & Design. What does one-point perspective mainly create?

- A. Louder sound
- B. Faster running
- C. Electrical flow
- D. Depth and distance

Q33. Design & Technology. Why test a prototype with the intended user?

- A. To change the subject
- B. To make the prototype official
- C. To check if it meets real user needs
- D. To avoid evaluation

Q34. Design & Technology. What is the difference between aesthetics and function?

- A. Aesthetics means strength only
- B. Aesthetics is appearance; function is what it does
- C. Both mean colour only
- D. Function means history

Q35. Design & Technology. A bridge prototype bends under load. Which improvement is most structural?

- A. Add triangular bracing
- B. Change the colour
- C. Make the label bigger
- D. Remove testing

Q36. Design & Technology. Which is a design criterion for a school water bottle?

- A. It should be mysterious
- B. It must play music
- C. It should be historically reliable
- D. It must not leak when carried in a bag

Q37. Music. Which describes timbre?

- A. The number of pages
- B. The historical date
- C. The unique quality or colour of a sound
- D. The speed of music

Q38. Music. Why might a composer use soft dynamics before a sudden loud chord?

- A. To change PE technique
- B. To create surprise and tension

- C. To make the piece silent forever
- D. To remove rhythm

Q39. Music. Which change is most likely to make a cheerful song sound sadder?

- A. Major to minor key
- B. Make it longer only
- C. Change the paper colour
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- A. Diminuendo
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- C. Tempo
- D. Crescendo

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- A. It measures rainfall
- B. It changes the score automatically
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Q42. Physical Education. Which is the best example of sportsmanship?

- A. Ignoring team-mates
- B. Accepting a referee's decision respectfully
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- D. Hiding the rules

Q43. Physical Education. Why is a warm-up useful before sprinting?

- A. It prepares muscles and raises pulse gradually
- B. It replaces training
- C. It lowers coordination
- D. It makes rules unnecessary

Q44. Physical Education. Which factor most improves quick changes of direction?

- A. Perspective
- B. Crescendo
- C. Chronology
- D. Agility

Short Written Section

Q45. English. Improve this sentence: 'The room was dark and scary.'

Answer: _____

Q46. Mathematics. Describe how to split a composite shape into rectangles to find area.

Answer: _____

Q47. Science. Explain the difference between accuracy and precision.

Answer: _____

Q48. Computing. Explain input, process and output using a ticket machine.

Answer: _____

Q49. Geography. Explain one human and one physical feature from a village map.

Answer: _____

Q50. History. Explain how bias may affect a source.

Answer: _____

Q51. Languages. Use context to guess the meaning of an unknown word.

Answer: _____

Q52. Art & Design. Evaluate a pattern using symmetry, motif and colour.

Answer: _____

Q53. Design & Technology. Explain how testing changes a prototype.

Answer: _____

Q54. Music. Explain the difference between rhythm and beat.

Answer: _____

Q55. Physical Education. Give one technique improvement for a sprint start.

Answer: _____

Hard Mixed Mock Paper 3 Answers

Q	Subject	Answer / guidance
1	English	C - Repetition of careful action suggests concern or importance.
2	English	B - Normal setting plus impossible detail creates mystery.
3	English	A - The contrast between noise and silence creates tension.
4	English	D - Body reaction shows emotion indirectly.
5	Mathematics	C - Total must be 108; $108 - 82 = 26$.
6	Mathematics	B - Volume = cross-section area x length.
7	Mathematics	A - Area increases by scale factor squared: 4 squared = 16; $12 \times 16 = 192$.
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10	Science	B - Plants use light for photosynthesis.
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13	Computing	C - Four right turns can form a square path.
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15	Computing	A - $\geq$ includes equality.
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18	Geography	B - It uses evidence, location and timing.
19	Geography	A - The sample does not represent affected residents.
20	Geography	D - Road traffic is human; river/homes place context includes physical/human interaction.
21	History	C - Rebuilding is an effect after the event.
22	History	B - Corroboration uses multiple sources.
23	History	A - A diary from the time is closer evidence.
24	History	D - Interpretation depends on evidence and perspective.

Q	Subject	Answer / guidance
25	Languages	C - Plural forms often change endings/forms.
26	Languages	B - Context helps meaning.
27	Languages	A - $12 = \text{ten} + 2$; $13 = \text{ten} + 3$.
28	Languages	D - Cognates can mislead if meanings differ.
29	Art & Design	C - A motif repeats within a pattern.
30	Art & Design	B - Asymmetry can feel dynamic.
31	Art & Design	A - Contrast and focal point improve readability.
32	Art & Design	D - Perspective creates the illusion of depth.
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34	Design & Technology	B - Design must consider both look and purpose.
35	Design & Technology	A - Triangulation strengthens structures.
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45	English	Check for precise vocabulary, logical explanation and correct subject concept.
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47	Science	Check for precise vocabulary, logical explanation and correct subject concept.
48	Computing	Check for precise vocabulary, logical explanation and correct subject concept.

Q	Subject	Answer / guidance
49	Geography	Check for precise vocabulary, logical explanation and correct subject concept.

Q	Subject	Answer / guidance
50	History	Check for precise vocabulary, logical explanation and correct subject concept.
51	Languages	Check for precise vocabulary, logical explanation and correct subject concept.
52	Art & Design	Check for precise vocabulary, logical explanation and correct subject concept.
53	Design & Technology	Check for precise vocabulary, logical explanation and correct subject concept.
54	Music	Check for precise vocabulary, logical explanation and correct subject concept.
55	Physical Education	Check for precise vocabulary, logical explanation and correct subject concept.

Hard Mixed Mock Paper 4 - 66 Questions

Suggested time: 60-70 minutes. Questions rotate across all subjects and include visual reasoning, subject vocabulary and elimination.

Q1. English. Which sentence most effectively builds suspense through contrast?

- A. The playground was bright and noisy, but the shed behind it stood silent.
- B. The playground was bright and noisy and fun.
- C. The shed was old and brown.
- D. I went to the playground.

Q2. English. Which phrase best shows fear without naming it?

- A. I was very scared.
- B. It was scary.
- C. I did not like it.
- D. My fingers tightened around the handle as my breath caught.

Q3. English. A writer describes a character as 'carefully folding the same letter again and again'. What can be inferred?

- A. The letter is definitely a shopping list.
- B. The character cannot read.
- C. The letter is emotionally important or worrying.
- D. The character enjoys origami only.

Q4. English. Which opening is strongest for a controlled mystery?

- A. There was a book.
- B. At first the library seemed ordinary, until one book whispered my name.
- C. I went to a place and something happened.
- D. It was a day.

Q5. Mathematics. A rectangle is enlarged by scale factor 4. Its original area is 12 cm squared. What is the enlarged area?

- A. 192 cm squared
- B. 48 cm squared
- C. 96 cm squared
- D. 64 cm squared

Q6. Mathematics. A triangle has angles in the ratio 3:4:5. What is the smallest angle?

- A. 60 degrees
- B. 75 degrees
- C. 36 degrees
- D. 45 degrees

Q7. Mathematics. The mean of six numbers is 18. Five numbers total 82. What is the missing number?

- A. 24
- B. 28
- C. 26
- D. 18

Q8. Mathematics. A prism has cross-section area 18 cm squared and length 7 cm. What is the volume?

- A. 98 cm cubed
- B. 126 cm cubed
- C. 25 cm cubed
- D. 63 cm cubed

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- A. Ramp height
- B. Distance travelled
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- A. Magnetism only
- B. Solubility
- C. Thermal insulation
- D. Transparency

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- A. Condensation
- B. Photosynthesis
- C. Evaporation
- D. Friction

Q13. Computing. A program uses IF score $\geq$ 80 THEN certificate = 'Gold'. A pupil scores 80. What happens?

- A. Gold certificate is awarded
- B. No certificate is awarded
- C. The score becomes 79
- D. The program must loop forever

Q14. Computing. A database query asks for Year 6 AND Music Club. Which record matches?

- A. Year 5 pupil in Music Club
- B. Year 6 pupil in Football Club
- C. Any Music Club pupil
- D. Year 6 pupil in Music Club

Q15. Computing. A robot repeats [move 3, turn right] four times. What is the likely route?

- A. A triangle
- B. No route
- C. A square-like route
- D. A straight line only

Q16. Computing. Which bug is most likely if valid pupils are rejected by a booking system?

- A. The database has names
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- C. The font is too small
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- A. Sample bias
- B. Too much reliability
- C. No human geography
- D. No physical feature

Q18. Geography. Which pair best combines human and physical geography?

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- B. A triangle and a prism
- C. A melody and tempo
- D. Road traffic affecting riverside homes

Q19. Geography. Why collect data at morning and afternoon rush hour?

- A. Rivers reverse every day
- B. Questionnaires need no sample

- C. Traffic and noise vary by time
- D. Maps stop working at noon

Q20. Geography. Which conclusion is strongest?

- A. I disliked the traffic.
- B. Noise readings were highest near station C during rush hour.
- C. The village felt bad.
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Q21. History. Which source is usually strongest for what someone saw during an event?

- A. A diary written at the time
- B. A modern unsupported blog
- C. A fictional story
- D. A cartoon made later

Q22. History. Why can two historians interpret the same event differently?

- A. Dates change every year
- B. One must be lying
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- A. Wooden houses were close together
- B. A candle was left burning
- C. The city rebuilt wider streets after the fire
- D. The weather was dry

Q24. History. What does corroboration mean?

- A. Ignoring disagreement
- B. Checking one source against another
- C. Making a source longer
- D. Drawing the source

Q25. Languages. In a made-up language, 'bon-lun' means 12 and 'bon-mit' means 13. If 'lun' is 2 and 'mit' is 3, what does 'bon' likely mean?

- A. ten
- B. one
- C. twenty
- D. and

Q26. Languages. Why are cognates useful but not always safe?

- A. They never help
- B. They are always numbers
- C. They remove grammar
- D. Some similar-looking words can be false friends

Q27. Languages. Which change is most likely when moving from singular to plural?

- A. The sentence must become past tense
- B. The accent always disappears
- C. The word may gain an ending or change form
- D. The word becomes a question

Q28. Languages. What helps most when translating an unknown phrase?

- A. Changing all nouns into verbs
- B. Context clues and word patterns
- C. Guessing the longest word
- D. Ignoring punctuation

Q29. Art & Design. Which design choice makes a warning poster easiest to read?

- A. Strong contrast and clear focal point
- B. Tiny pale text on white
- C. Many overlapping patterns
- D. No hierarchy

Q30. Art & Design. What does one-point perspective mainly create?

- A. Louder sound
- B. Faster running
- C. Electrical flow
- D. Depth and distance

Q31. Art & Design. A repeated leaf shape across a border is a...

- A. tributary
- B. crotchet
- C. motif/pattern
- D. variable

Q32. Art & Design. Why might an artist use asymmetry?

- A. To conduct heat
- B. To create visual interest or tension
- C. To make both sides identical
- D. To measure volume

Q33. Design & Technology. A bridge prototype bends under load. Which improvement is most structural?

- A. Add triangular bracing
- B. Change the colour
- C. Make the label bigger
- D. Remove testing

Q34. Design & Technology. Which is a design criterion for a school water bottle?

- A. It should be mysterious
- B. It must play music
- C. It should be historically reliable
- D. It must not leak when carried in a bag

Q35. Design & Technology. Why test a prototype with the intended user?

- A. To change the subject
- B. To make the prototype official
- C. To check if it meets real user needs
- D. To avoid evaluation

Q36. Design & Technology. What is the difference between aesthetics and function?

- A. Aesthetics means strength only
- B. Aesthetics is appearance; function is what it does
- C. Both mean colour only
- D. Function means history

Q37. Music. Which change is most likely to make a cheerful song sound sadder?

- A. Major to minor key
- B. Make it longer only
- C. Change the paper colour
- D. Remove all rhythm

Q38. Music. A piece gradually becomes louder towards the climax. What is this?

- A. Diminuendo
- B. Rest

- C. Tempo
- D. Crescendo

Q39. Music. Which describes timbre?

- A. The number of pages
- B. The historical date
- C. The unique quality or colour of a sound
- D. The speed of music

Q40. Music. Why might a composer use soft dynamics before a sudden loud chord?

- A. To change PE technique
- B. To create surprise and tension
- C. To make the piece silent forever
- D. To remove rhythm

Q41. Physical Education. Why is a warm-up useful before sprinting?

- A. It prepares muscles and raises pulse gradually
- B. It replaces training
- C. It lowers coordination
- D. It makes rules unnecessary

Q42. Physical Education. Which factor most improves quick changes of direction?

- A. Perspective
- B. Crescendo
- C. Chronology
- D. Agility

Q43. Physical Education. Why is technique analysis useful after a performance?

- A. It measures rainfall
- B. It changes the score automatically
- C. It identifies specific improvements
- D. It removes the need to practise

Q44. Physical Education. Which is the best example of sportsmanship?

- A. Ignoring team-mates
- B. Accepting a referee's decision respectfully
- C. Arguing after every decision
- D. Hiding the rules

Short Written Section

Q45. English. Rewrite 'I was scared' using body action and atmosphere.

Answer: _____

Q46. Mathematics. Explain how to solve an angle problem on a straight line when there are three angles.

Answer: _____

Q47. Science. Identify independent, dependent and control variables in a ramp investigation.

Answer: _____

Q48. Computing. Write pseudocode using IF/ELSE for a homework app.

Answer: _____

Q49. Geography. Design a fair fieldwork plan to measure road noise.

Answer: _____

Q50. History. Rank three sources by reliability and justify your answer.

Answer: _____

Q51. Languages. Explain how to use pattern spotting in a made-up language.

Answer: _____

Q52. Art & Design. Explain how contrast improves a poster.

Answer: _____

Q53. Design & Technology. Explain how triangular supports strengthen a structure.

Answer: _____

Q54. Music. Explain how tempo and dynamics can change mood.

Answer: _____

Q55. Physical Education. Explain why warm-up and cool-down are different.

Answer: _____

Hard Mixed Mock Paper 4 Answers

Q	Subject	Answer / guidance
1	English	A - The contrast between noise and silence creates tension.
2	English	D - Body reaction shows emotion indirectly.
3	English	C - Repetition of careful action suggests concern or importance.
4	English	B - Normal setting plus impossible detail creates mystery.
5	Mathematics	A - Area increases by scale factor squared: 4 squared = 16; $12 \times 16 = 192$.
6	Mathematics	D - $3+4+5=12$ parts; $180/12=15$; smallest= $3 \times 15=45$.
7	Mathematics	C - Total must be 108; $108-82=26$.
8	Mathematics	B - Volume = cross-section area x length.
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10	Science	D - Close repeat readings suggest reliability.
11	Science	C - Handles should not conduct heat easily.
12	Science	B - Plants use light for photosynthesis.
13	Computing	A - $\geq$ includes equality.
14	Computing	D - AND requires both conditions.
15	Computing	C - Four right turns can form a square path.
16	Computing	B - A reversed condition sends correct users the wrong way.
17	Geography	A - The sample does not represent affected residents.
18	Geography	D - Road traffic is human; river/homes place context includes physical/human interaction.
19	Geography	C - Time affects traffic volume and noise.
20	Geography	B - It uses evidence, location and timing.
21	History	A - A diary from the time is closer evidence.
22	History	D - Interpretation depends on evidence and perspective.
23	History	C - Rebuilding is an effect after the event.
24	History	B - Corroboration uses multiple sources.
Q	Subject	Answer / guidance
25	Languages	A - $12 = \text{ten} + 2$; $13 = \text{ten} + 3$.
26	Languages	D - Cognates can mislead if meanings differ.
27	Languages	C - Plural forms often change endings/forms.
28	Languages	B - Context helps meaning.
29	Art & Design	A - Contrast and focal point improve readability.
30	Art & Design	D - Perspective creates the illusion of depth.
31	Art & Design	C - A motif repeats within a pattern.
32	Art & Design	B - Asymmetry can feel dynamic.
33	Design & Technology	A - Triangulation strengthens structures.
34	Design & Technology	D - A criterion states a measurable requirement.
35	Design & Technology	C - User testing gives relevant feedback.
36	Design & Technology	B - Design must consider both look and purpose.
37	Music	A - Minor keys often create a sadder mood.
38	Music	D - Crescendo means getting louder.
39	Music	C - Timbre identifies sound quality.
40	Music	B - Contrast in dynamics can create impact.
41	Physical Education	A - Warm-ups prepare the body and reduce injury risk.
42	Physical Education	D - Agility is the ability to move quickly and change direction.
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45	English	Check for precise vocabulary, logical explanation and correct subject concept.
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Q	Subject	Answer / guidance
49	Geography	Check for precise vocabulary, logical explanation and correct subject concept.

Q	Subject	Answer / guidance
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51	Languages	Check for precise vocabulary, logical explanation and correct subject concept.
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Hard Mixed Mock Paper 5 - 66 Questions

Suggested time: 60-70 minutes. Questions rotate across all subjects and include visual reasoning, subject vocabulary and elimination.

Q1. English. A writer describes a character as 'carefully folding the same letter again and again'. What can be inferred?

- A. The letter is definitely a shopping list.
- B. The character cannot read.
- C. The letter is emotionally important or worrying.
- D. The character enjoys origami only.

Q2. English. Which opening is strongest for a controlled mystery?

- A. There was a book.
- B. At first the library seemed ordinary, until one book whispered my name.
- C. I went to a place and something happened.
- D. It was a day.

Q3. English. Which sentence most effectively builds suspense through contrast?

- A. The playground was bright and noisy, but the shed behind it stood silent.
- B. The playground was bright and noisy and fun.
- C. The shed was old and brown.
- D. I went to the playground.

Q4. English. Which phrase best shows fear without naming it?

- A. I was very scared.
- B. It was scary.
- C. I did not like it.
- D. My fingers tightened around the handle as my breath caught.

Q5. Mathematics. The mean of six numbers is 18. Five numbers total 82. What is the missing number?

- A. 24
- B. 28
- C. 26
- D. 18

Q6. Mathematics. A prism has cross-section area 18 cm squared and length 7 cm. What is the volume?

- A. 98 cm cubed
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- A. It prepares muscles and raises pulse gradually
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- C. It lowers coordination
- D. It makes rules unnecessary

Q44. Physical Education. Which factor most improves quick changes of direction?

- A. Perspective
- B. Crescendo
- C. Chronology
- D. Agility

Short Written Section

Q45. English. Explain why contrast can create suspense in a story opening.

Answer: _____

Q46. Mathematics. A shape is enlarged by scale factor 3. Explain why the area scale factor is not 3.

Answer: _____

Q47. Science. Explain why repeat readings can improve reliability.

Answer: _____

Q48. Computing. Explain why AND gives fewer database results than OR.

Answer: _____

Q49. Geography. Explain why sample bias weakens a questionnaire.

Answer: _____

Q50. History. Explain the difference between cause and consequence.

Answer: _____

Q51. Languages. Give one example of a false friend and explain the risk.

Answer: _____

Q52. Art & Design. Describe how perspective creates depth.

Answer: _____

Q53. Design & Technology. Write three design criteria for a reusable lunchbox.

Answer: _____

Q54. Music. Describe the effect of a crescendo before a climax.

Answer: _____

Q55. Physical Education. Describe how agility helps in football or netball.

Answer: _____

Hard Mixed Mock Paper 5 Answers

Q	Subject	Answer / guidance
1	English	C - Repetition of careful action suggests concern or importance.
2	English	B - Normal setting plus impossible detail creates mystery.
3	English	A - The contrast between noise and silence creates tension.
4	English	D - Body reaction shows emotion indirectly.
5	Mathematics	C - Total must be 108; $108 - 82 = 26$.
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11	Science	A - The independent variable is the one changed deliberately.
12	Science	D - Close repeat readings suggest reliability.
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18	Geography	B - It uses evidence, location and timing.
19	Geography	A - The sample does not represent affected residents.
20	Geography	D - Road traffic is human; river/homes place context includes physical/human interaction.
21	History	C - Rebuilding is an effect after the event.
22	History	B - Corroboration uses multiple sources.
23	History	A - A diary from the time is closer evidence.
24	History	D - Interpretation depends on evidence and perspective.

Q	Subject	Answer / guidance
25	Languages	C - Plural forms often change endings/forms.
26	Languages	B - Context helps meaning.
27	Languages	A - $12 = \text{ten} + 2$; $13 = \text{ten} + 3$.
28	Languages	D - Cognates can mislead if meanings differ.
29	Art & Design	C - A motif repeats within a pattern.
30	Art & Design	B - Asymmetry can feel dynamic.
31	Art & Design	A - Contrast and focal point improve readability.
32	Art & Design	D - Perspective creates the illusion of depth.
33	Design & Technology	C - User testing gives relevant feedback.
34	Design & Technology	B - Design must consider both look and purpose.
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Q	Subject	Answer / guidance
49	Geography	Check for precise vocabulary, logical explanation and correct subject concept.

Q	Subject	Answer / guidance
50	History	Check for precise vocabulary, logical explanation and correct subject concept.
51	Languages	Check for precise vocabulary, logical explanation and correct subject concept.
52	Art & Design	Check for precise vocabulary, logical explanation and correct subject concept.
53	Design & Technology	Check for precise vocabulary, logical explanation and correct subject concept.
54	Music	Check for precise vocabulary, logical explanation and correct subject concept.
55	Physical Education	Check for precise vocabulary, logical explanation and correct subject concept.

Chapter 14: Answer Sheets and Progress Trackers

Reusable Multiple Choice Answer Sheet 1

Q	A	B	C	D
1	☐	☐	☐	☐
2	☐	☐	☐	☐
3	☐	☐	☐	☐
4	☐	☐	☐	☐
5	☐	☐	☐	☐
6	☐	☐	☐	☐
7	☐	☐	☐	☐
8	☐	☐	☐	☐
9	☐	☐	☐	☐
10	☐	☐	☐	☐
11	☐	☐	☐	☐
12	☐	☐	☐	☐
13	☐	☐	☐	☐
14	☐	☐	☐	☐
15	☐	☐	☐	☐
16	☐	☐	☐	☐
17	☐	☐	☐	☐
18	☐	☐	☐	☐
19	☐	☐	☐	☐
20	☐	☐	☐	☐
21	☐	☐	☐	☐
22	☐	☐	☐	☐
23	☐	☐	☐	☐
24	☐	☐	☐	☐
25	☐	☐	☐	☐
26	☐	☐	☐	☐
27	☐	☐	☐	☐
28	☐	☐	☐	☐
29	☐	☐	☐	☐
30	☐	☐	☐	☐
31	☐	☐	☐	☐
32	☐	☐	☐	☐
33	☐	☐	☐	☐
34	☐	☐	☐	☐
35	☐	☐	☐	☐
36	☐	☐	☐	☐
37	☐	☐	☐	☐
38	☐	☐	☐	☐
39	☐	☐	☐	☐
40	☐	☐	☐	☐
41	☐	☐	☐	☐
42	☐	☐	☐	☐
43	☐	☐	☐	☐
44	☐	☐	☐	☐
45	☐	☐	☐	☐
46	☐	☐	☐	☐

Q	A	B	C	D
47	■	■	■	■
48	■	■	■	■
49	■	■	■	■
50	■	■	■	■
51	■	■	■	■
52	■	■	■	■
53	■	■	■	■
54	■	■	■	■
55	■	■	■	■
56	■	■	■	■
57	■	■	■	■
58	■	■	■	■
59	■	■	■	■
60	■	■	■	■

Reusable Multiple Choice Answer Sheet 2

Q	A	B	C	D
1	☐	☐	☐	☐
2	☐	☐	☐	☐
3	☐	☐	☐	☐
4	☐	☐	☐	☐
5	☐	☐	☐	☐
6	☐	☐	☐	☐
7	☐	☐	☐	☐
8	☐	☐	☐	☐
9	☐	☐	☐	☐
10	☐	☐	☐	☐
11	☐	☐	☐	☐
12	☐	☐	☐	☐
13	☐	☐	☐	☐
14	☐	☐	☐	☐
15	☐	☐	☐	☐
16	☐	☐	☐	☐
17	☐	☐	☐	☐
18	☐	☐	☐	☐
19	☐	☐	☐	☐
20	☐	☐	☐	☐
21	☐	☐	☐	☐
22	☐	☐	☐	☐
23	☐	☐	☐	☐
24	☐	☐	☐	☐
25	☐	☐	☐	☐
26	☐	☐	☐	☐
27	☐	☐	☐	☐
28	☐	☐	☐	☐
29	☐	☐	☐	☐
30	☐	☐	☐	☐
31	☐	☐	☐	☐
32	☐	☐	☐	☐
33	☐	☐	☐	☐
34	☐	☐	☐	☐
35	☐	☐	☐	☐
36	☐	☐	☐	☐
37	☐	☐	☐	☐
38	☐	☐	☐	☐
39	☐	☐	☐	☐
40	☐	☐	☐	☐
41	☐	☐	☐	☐
42	☐	☐	☐	☐
43	☐	☐	☐	☐
44	☐	☐	☐	☐
45	☐	☐	☐	☐
46	☐	☐	☐	☐
47	☐	☐	☐	☐
48	☐	☐	☐	☐

Q	A	B	C	D
49	■	■	■	■
50	■	■	■	■
51	■	■	■	■
52	■	■	■	■
53	■	■	■	■
54	■	■	■	■
55	■	■	■	■
56	■	■	■	■
57	■	■	■	■
58	■	■	■	■
59	■	■	■	■
60	■	■	■	■

Reusable Multiple Choice Answer Sheet 3

Q	A	B	C	D
1	☐	☐	☐	☐
2	☐	☐	☐	☐
3	☐	☐	☐	☐
4	☐	☐	☐	☐
5	☐	☐	☐	☐
6	☐	☐	☐	☐
7	☐	☐	☐	☐
8	☐	☐	☐	☐
9	☐	☐	☐	☐
10	☐	☐	☐	☐
11	☐	☐	☐	☐
12	☐	☐	☐	☐
13	☐	☐	☐	☐
14	☐	☐	☐	☐
15	☐	☐	☐	☐
16	☐	☐	☐	☐
17	☐	☐	☐	☐
18	☐	☐	☐	☐
19	☐	☐	☐	☐
20	☐	☐	☐	☐
21	☐	☐	☐	☐
22	☐	☐	☐	☐
23	☐	☐	☐	☐
24	☐	☐	☐	☐
25	☐	☐	☐	☐
26	☐	☐	☐	☐
27	☐	☐	☐	☐
28	☐	☐	☐	☐
29	☐	☐	☐	☐
30	☐	☐	☐	☐
31	☐	☐	☐	☐
32	☐	☐	☐	☐
33	☐	☐	☐	☐
34	☐	☐	☐	☐
35	☐	☐	☐	☐
36	☐	☐	☐	☐
37	☐	☐	☐	☐
38	☐	☐	☐	☐
39	☐	☐	☐	☐
40	☐	☐	☐	☐
41	☐	☐	☐	☐
42	☐	☐	☐	☐
43	☐	☐	☐	☐
44	☐	☐	☐	☐
45	☐	☐	☐	☐
46	☐	☐	☐	☐
47	☐	☐	☐	☐
48	☐	☐	☐	☐

Q	A	B	C	D
49	■	■	■	■
50	■	■	■	■
51	■	■	■	■
52	■	■	■	■
53	■	■	■	■
54	■	■	■	■
55	■	■	■	■
56	■	■	■	■
57	■	■	■	■
58	■	■	■	■
59	■	■	■	■
60	■	■	■	■

Reusable Multiple Choice Answer Sheet 4

Q	A	B	C	D
1	☐	☐	☐	☐
2	☐	☐	☐	☐
3	☐	☐	☐	☐
4	☐	☐	☐	☐
5	☐	☐	☐	☐
6	☐	☐	☐	☐
7	☐	☐	☐	☐
8	☐	☐	☐	☐
9	☐	☐	☐	☐
10	☐	☐	☐	☐
11	☐	☐	☐	☐
12	☐	☐	☐	☐
13	☐	☐	☐	☐
14	☐	☐	☐	☐
15	☐	☐	☐	☐
16	☐	☐	☐	☐
17	☐	☐	☐	☐
18	☐	☐	☐	☐
19	☐	☐	☐	☐
20	☐	☐	☐	☐
21	☐	☐	☐	☐
22	☐	☐	☐	☐
23	☐	☐	☐	☐
24	☐	☐	☐	☐
25	☐	☐	☐	☐
26	☐	☐	☐	☐
27	☐	☐	☐	☐
28	☐	☐	☐	☐
29	☐	☐	☐	☐
30	☐	☐	☐	☐
31	☐	☐	☐	☐
32	☐	☐	☐	☐
33	☐	☐	☐	☐
34	☐	☐	☐	☐
35	☐	☐	☐	☐
36	☐	☐	☐	☐
37	☐	☐	☐	☐
38	☐	☐	☐	☐
39	☐	☐	☐	☐
40	☐	☐	☐	☐
41	☐	☐	☐	☐
42	☐	☐	☐	☐
43	☐	☐	☐	☐
44	☐	☐	☐	☐
45	☐	☐	☐	☐
46	☐	☐	☐	☐
47	☐	☐	☐	☐
48	☐	☐	☐	☐

Q	A	B	C	D
49	■	■	■	■
50	■	■	■	■
51	■	■	■	■
52	■	■	■	■
53	■	■	■	■
54	■	■	■	■
55	■	■	■	■
56	■	■	■	■
57	■	■	■	■
58	■	■	■	■
59	■	■	■	■
60	■	■	■	■

Reusable Multiple Choice Answer Sheet 5

Q	A	B	C	D
1	☐	☐	☐	☐
2	☐	☐	☐	☐
3	☐	☐	☐	☐
4	☐	☐	☐	☐
5	☐	☐	☐	☐
6	☐	☐	☐	☐
7	☐	☐	☐	☐
8	☐	☐	☐	☐
9	☐	☐	☐	☐
10	☐	☐	☐	☐
11	☐	☐	☐	☐
12	☐	☐	☐	☐
13	☐	☐	☐	☐
14	☐	☐	☐	☐
15	☐	☐	☐	☐
16	☐	☐	☐	☐
17	☐	☐	☐	☐
18	☐	☐	☐	☐
19	☐	☐	☐	☐
20	☐	☐	☐	☐
21	☐	☐	☐	☐
22	☐	☐	☐	☐
23	☐	☐	☐	☐
24	☐	☐	☐	☐
25	☐	☐	☐	☐
26	☐	☐	☐	☐
27	☐	☐	☐	☐
28	☐	☐	☐	☐
29	☐	☐	☐	☐
30	☐	☐	☐	☐
31	☐	☐	☐	☐
32	☐	☐	☐	☐
33	☐	☐	☐	☐
34	☐	☐	☐	☐
35	☐	☐	☐	☐
36	☐	☐	☐	☐
37	☐	☐	☐	☐
38	☐	☐	☐	☐
39	☐	☐	☐	☐
40	☐	☐	☐	☐
41	☐	☐	☐	☐
42	☐	☐	☐	☐
43	☐	☐	☐	☐
44	☐	☐	☐	☐
45	☐	☐	☐	☐
46	☐	☐	☐	☐
47	☐	☐	☐	☐
48	☐	☐	☐	☐

Q	A	B	C	D
49	■	■	■	■
50	■	■	■	■
51	■	■	■	■
52	■	■	■	■
53	■	■	■	■
54	■	■	■	■
55	■	■	■	■
56	■	■	■	■
57	■	■	■	■
58	■	■	■	■
59	■	■	■	■
60	■	■	■	■

Reusable Multiple Choice Answer Sheet 6

Q	A	B	C	D
1	☐	☐	☐	☐
2	☐	☐	☐	☐
3	☐	☐	☐	☐
4	☐	☐	☐	☐
5	☐	☐	☐	☐
6	☐	☐	☐	☐
7	☐	☐	☐	☐
8	☐	☐	☐	☐
9	☐	☐	☐	☐
10	☐	☐	☐	☐
11	☐	☐	☐	☐
12	☐	☐	☐	☐
13	☐	☐	☐	☐
14	☐	☐	☐	☐
15	☐	☐	☐	☐
16	☐	☐	☐	☐
17	☐	☐	☐	☐
18	☐	☐	☐	☐
19	☐	☐	☐	☐
20	☐	☐	☐	☐
21	☐	☐	☐	☐
22	☐	☐	☐	☐
23	☐	☐	☐	☐
24	☐	☐	☐	☐
25	☐	☐	☐	☐
26	☐	☐	☐	☐
27	☐	☐	☐	☐
28	☐	☐	☐	☐
29	☐	☐	☐	☐
30	☐	☐	☐	☐
31	☐	☐	☐	☐
32	☐	☐	☐	☐
33	☐	☐	☐	☐
34	☐	☐	☐	☐
35	☐	☐	☐	☐
36	☐	☐	☐	☐
37	☐	☐	☐	☐
38	☐	☐	☐	☐
39	☐	☐	☐	☐
40	☐	☐	☐	☐
41	☐	☐	☐	☐
42	☐	☐	☐	☐
43	☐	☐	☐	☐
44	☐	☐	☐	☐
45	☐	☐	☐	☐
46	☐	☐	☐	☐
47	☐	☐	☐	☐
48	☐	☐	☐	☐

Q	A	B	C	D
49	■	■	■	■
50	■	■	■	■
51	■	■	■	■
52	■	■	■	■
53	■	■	■	■
54	■	■	■	■
55	■	■	■	■
56	■	■	■	■
57	■	■	■	■
58	■	■	■	■
59	■	■	■	■
60	■	■	■	■

Reusable Multiple Choice Answer Sheet 7

Q	A	B	C	D
1	☐	☐	☐	☐
2	☐	☐	☐	☐
3	☐	☐	☐	☐
4	☐	☐	☐	☐
5	☐	☐	☐	☐
6	☐	☐	☐	☐
7	☐	☐	☐	☐
8	☐	☐	☐	☐
9	☐	☐	☐	☐
10	☐	☐	☐	☐
11	☐	☐	☐	☐
12	☐	☐	☐	☐
13	☐	☐	☐	☐
14	☐	☐	☐	☐
15	☐	☐	☐	☐
16	☐	☐	☐	☐
17	☐	☐	☐	☐
18	☐	☐	☐	☐
19	☐	☐	☐	☐
20	☐	☐	☐	☐
21	☐	☐	☐	☐
22	☐	☐	☐	☐
23	☐	☐	☐	☐
24	☐	☐	☐	☐
25	☐	☐	☐	☐
26	☐	☐	☐	☐
27	☐	☐	☐	☐
28	☐	☐	☐	☐
29	☐	☐	☐	☐
30	☐	☐	☐	☐
31	☐	☐	☐	☐
32	☐	☐	☐	☐
33	☐	☐	☐	☐
34	☐	☐	☐	☐
35	☐	☐	☐	☐
36	☐	☐	☐	☐
37	☐	☐	☐	☐
38	☐	☐	☐	☐
39	☐	☐	☐	☐
40	☐	☐	☐	☐
41	☐	☐	☐	☐
42	☐	☐	☐	☐
43	☐	☐	☐	☐
44	☐	☐	☐	☐
45	☐	☐	☐	☐
46	☐	☐	☐	☐
47	☐	☐	☐	☐
48	☐	☐	☐	☐

Q	A	B	C	D
49	■	■	■	■
50	■	■	■	■
51	■	■	■	■
52	■	■	■	■
53	■	■	■	■
54	■	■	■	■
55	■	■	■	■
56	■	■	■	■
57	■	■	■	■
58	■	■	■	■
59	■	■	■	■
60	■	■	■	■

Reusable Multiple Choice Answer Sheet 8

Q	A	B	C	D
1	☐	☐	☐	☐
2	☐	☐	☐	☐
3	☐	☐	☐	☐
4	☐	☐	☐	☐
5	☐	☐	☐	☐
6	☐	☐	☐	☐
7	☐	☐	☐	☐
8	☐	☐	☐	☐
9	☐	☐	☐	☐
10	☐	☐	☐	☐
11	☐	☐	☐	☐
12	☐	☐	☐	☐
13	☐	☐	☐	☐
14	☐	☐	☐	☐
15	☐	☐	☐	☐
16	☐	☐	☐	☐
17	☐	☐	☐	☐
18	☐	☐	☐	☐
19	☐	☐	☐	☐
20	☐	☐	☐	☐
21	☐	☐	☐	☐
22	☐	☐	☐	☐
23	☐	☐	☐	☐
24	☐	☐	☐	☐
25	☐	☐	☐	☐
26	☐	☐	☐	☐
27	☐	☐	☐	☐
28	☐	☐	☐	☐
29	☐	☐	☐	☐
30	☐	☐	☐	☐
31	☐	☐	☐	☐
32	☐	☐	☐	☐
33	☐	☐	☐	☐
34	☐	☐	☐	☐
35	☐	☐	☐	☐
36	☐	☐	☐	☐
37	☐	☐	☐	☐
38	☐	☐	☐	☐
39	☐	☐	☐	☐
40	☐	☐	☐	☐
41	☐	☐	☐	☐
42	☐	☐	☐	☐
43	☐	☐	☐	☐
44	☐	☐	☐	☐
45	☐	☐	☐	☐
46	☐	☐	☐	☐
47	☐	☐	☐	☐
48	☐	☐	☐	☐

Q	A	B	C	D
49	■	■	■	■
50	■	■	■	■
51	■	■	■	■
52	■	■	■	■
53	■	■	■	■
54	■	■	■	■
55	■	■	■	■
56	■	■	■	■
57	■	■	■	■
58	■	■	■	■
59	■	■	■	■
60	■	■	■	■

Reusable Multiple Choice Answer Sheet 9

Q	A	B	C	D
1	☐	☐	☐	☐
2	☐	☐	☐	☐
3	☐	☐	☐	☐
4	☐	☐	☐	☐
5	☐	☐	☐	☐
6	☐	☐	☐	☐
7	☐	☐	☐	☐
8	☐	☐	☐	☐
9	☐	☐	☐	☐
10	☐	☐	☐	☐
11	☐	☐	☐	☐
12	☐	☐	☐	☐
13	☐	☐	☐	☐
14	☐	☐	☐	☐
15	☐	☐	☐	☐
16	☐	☐	☐	☐
17	☐	☐	☐	☐
18	☐	☐	☐	☐
19	☐	☐	☐	☐
20	☐	☐	☐	☐
21	☐	☐	☐	☐
22	☐	☐	☐	☐
23	☐	☐	☐	☐
24	☐	☐	☐	☐
25	☐	☐	☐	☐
26	☐	☐	☐	☐
27	☐	☐	☐	☐
28	☐	☐	☐	☐
29	☐	☐	☐	☐
30	☐	☐	☐	☐
31	☐	☐	☐	☐
32	☐	☐	☐	☐
33	☐	☐	☐	☐
34	☐	☐	☐	☐
35	☐	☐	☐	☐
36	☐	☐	☐	☐
37	☐	☐	☐	☐
38	☐	☐	☐	☐
39	☐	☐	☐	☐
40	☐	☐	☐	☐
41	☐	☐	☐	☐
42	☐	☐	☐	☐
43	☐	☐	☐	☐
44	☐	☐	☐	☐
45	☐	☐	☐	☐
46	☐	☐	☐	☐
47	☐	☐	☐	☐
48	☐	☐	☐	☐

Q	A	B	C	D
49	■	■	■	■
50	■	■	■	■
51	■	■	■	■
52	■	■	■	■
53	■	■	■	■
54	■	■	■	■
55	■	■	■	■
56	■	■	■	■
57	■	■	■	■
58	■	■	■	■
59	■	■	■	■
60	■	■	■	■

Reusable Multiple Choice Answer Sheet 10

Q	A	B	C	D
1	☐	☐	☐	☐
2	☐	☐	☐	☐
3	☐	☐	☐	☐
4	☐	☐	☐	☐
5	☐	☐	☐	☐
6	☐	☐	☐	☐
7	☐	☐	☐	☐
8	☐	☐	☐	☐
9	☐	☐	☐	☐
10	☐	☐	☐	☐
11	☐	☐	☐	☐
12	☐	☐	☐	☐
13	☐	☐	☐	☐
14	☐	☐	☐	☐
15	☐	☐	☐	☐
16	☐	☐	☐	☐
17	☐	☐	☐	☐
18	☐	☐	☐	☐
19	☐	☐	☐	☐
20	☐	☐	☐	☐
21	☐	☐	☐	☐
22	☐	☐	☐	☐
23	☐	☐	☐	☐
24	☐	☐	☐	☐
25	☐	☐	☐	☐
26	☐	☐	☐	☐
27	☐	☐	☐	☐
28	☐	☐	☐	☐
29	☐	☐	☐	☐
30	☐	☐	☐	☐
31	☐	☐	☐	☐
32	☐	☐	☐	☐
33	☐	☐	☐	☐
34	☐	☐	☐	☐
35	☐	☐	☐	☐
36	☐	☐	☐	☐
37	☐	☐	☐	☐
38	☐	☐	☐	☐
39	☐	☐	☐	☐
40	☐	☐	☐	☐
41	☐	☐	☐	☐
42	☐	☐	☐	☐
43	☐	☐	☐	☐
44	☐	☐	☐	☐
45	☐	☐	☐	☐
46	☐	☐	☐	☐
47	☐	☐	☐	☐
48	☐	☐	☐	☐

Q	A	B	C	D
49	■	■	■	■
50	■	■	■	■
51	■	■	■	■
52	■	■	■	■
53	■	■	■	■
54	■	■	■	■
55	■	■	■	■
56	■	■	■	■
57	■	■	■	■
58	■	■	■	■
59	■	■	■	■
60	■	■	■	■

Reusable Multiple Choice Answer Sheet 11

Q	A	B	C	D
1	☐	☐	☐	☐
2	☐	☐	☐	☐
3	☐	☐	☐	☐
4	☐	☐	☐	☐
5	☐	☐	☐	☐
6	☐	☐	☐	☐
7	☐	☐	☐	☐
8	☐	☐	☐	☐
9	☐	☐	☐	☐
10	☐	☐	☐	☐
11	☐	☐	☐	☐
12	☐	☐	☐	☐
13	☐	☐	☐	☐
14	☐	☐	☐	☐
15	☐	☐	☐	☐
16	☐	☐	☐	☐
17	☐	☐	☐	☐
18	☐	☐	☐	☐
19	☐	☐	☐	☐
20	☐	☐	☐	☐
21	☐	☐	☐	☐
22	☐	☐	☐	☐
23	☐	☐	☐	☐
24	☐	☐	☐	☐
25	☐	☐	☐	☐
26	☐	☐	☐	☐
27	☐	☐	☐	☐
28	☐	☐	☐	☐
29	☐	☐	☐	☐
30	☐	☐	☐	☐
31	☐	☐	☐	☐
32	☐	☐	☐	☐
33	☐	☐	☐	☐
34	☐	☐	☐	☐
35	☐	☐	☐	☐
36	☐	☐	☐	☐
37	☐	☐	☐	☐
38	☐	☐	☐	☐
39	☐	☐	☐	☐
40	☐	☐	☐	☐
41	☐	☐	☐	☐
42	☐	☐	☐	☐
43	☐	☐	☐	☐
44	☐	☐	☐	☐
45	☐	☐	☐	☐
46	☐	☐	☐	☐
47	☐	☐	☐	☐
48	☐	☐	☐	☐

Q	A	B	C	D
49	■	■	■	■
50	■	■	■	■
51	■	■	■	■
52	■	■	■	■
53	■	■	■	■
54	■	■	■	■
55	■	■	■	■
56	■	■	■	■
57	■	■	■	■
58	■	■	■	■
59	■	■	■	■
60	■	■	■	■

English Progress Tracker

Attempt	Date	Score	Main weakness	Next action
1				
2				
3				
4				
5				
6				
7				

Correction space

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Mathematics Progress Tracker

Attempt	Date	Score	Main weakness	Next action
1				
2				
3				
4				
5				
6				
7				

Correction space

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Science Progress Tracker

Attempt	Date	Score	Main weakness	Next action
1				
2				
3				
4				
5				
6				
7				

Correction space

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Computing Progress Tracker

Attempt	Date	Score	Main weakness	Next action
1				
2				
3				
4				
5				
6				
7				

Correction space

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Geography Progress Tracker

Attempt	Date	Score	Main weakness	Next action
1				
2				
3				
4				
5				
6				
7				

Correction space

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

History Progress Tracker

Attempt	Date	Score	Main weakness	Next action
1				
2				
3				
4				
5				
6				
7				

Correction space

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Languages Progress Tracker

Attempt	Date	Score	Main weakness	Next action
1				
2				
3				
4				
5				
6				
7				

Correction space

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Art & Design Progress Tracker

Attempt	Date	Score	Main weakness	Next action
1				
2				
3				
4				
5				
6				
7				

Correction space

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Design & Technology Progress Tracker

Attempt	Date	Score	Main weakness	Next action
1				
2				
3				
4				
5				
6				
7				

Correction space

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Music Progress Tracker

Attempt	Date	Score	Main weakness	Next action
1				
2				
3				
4				
5				
6				
7				

Correction space

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Physical Education Progress Tracker

Attempt	Date	Score	Main weakness	Next action
1				
2				
3				
4				
5				
6				
7				

Correction space

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Correction: _____

Creative Writing Progress Tracker

Attempt	Date	Score	Main weakness	Next action
1				
2				
3				
4				
5				
6				
7				

Correction space

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Correction:

Hard Error Clinic Page 1

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 2

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 3

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 4

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 5

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 6

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 7

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 8

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 9

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 11

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 12

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 13

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 14

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 16

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 17

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 18

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 19

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 21

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 22

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 23

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 24

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 25

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 27

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 30

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 31

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 34

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 35

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 36

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 40

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 41

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 42

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 43

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 44

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 45

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 48

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Hard Error Clinic Page 49

Use this page after marking. The strongest students improve by classifying errors, not just checking the score.

Error type	What happened?	Correct method	Similar practice question
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			
Vocabulary / diagram / reasoning / timing			

Reflection

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____

Reflection: _____