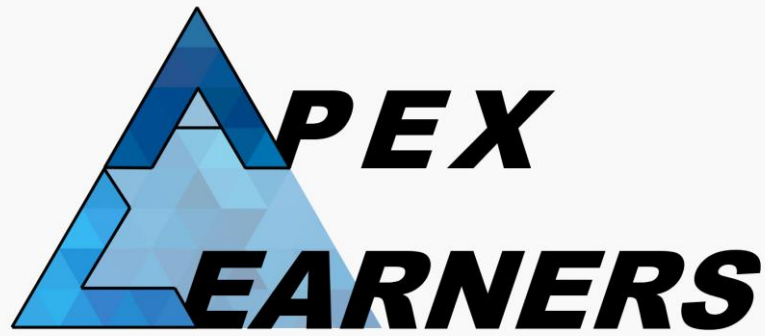




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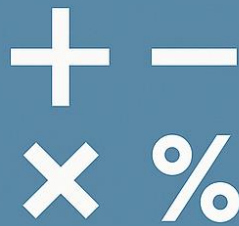
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Schools Admissions Tests

CAT4 Guide for Parents



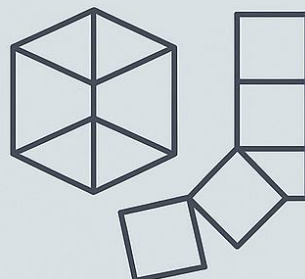
**VERBAL
REASONING**



**QUANTITATIVE
REASONING**



**NON-VERBAL
REASONING**



**SPATIAL
ABILITY**

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What is the CAT4?

The **Cognitive Abilities Test (CAT4)** is a **timed, multiple-choice** assessment, published by GL Assessment, and used in UK and international schools to profile how pupils think and learn.

It measures four types of reasoning: **Verbal, Quantitative, Non-verbal** and **Spatial**, across levels **A–G** (ages **6–17**). Each section (called a **battery**) has **two short subtests** and the whole test typically lasts **about 72 minutes**. It evaluates underlying reasoning rather than taught curriculum knowledge.

The **CAT4** is used for a variety of purposes, such as identifying students' strengths and weaknesses, supporting learning by suggesting targeted interventions and aiding in the selection process for selective schools or educational programmes.

Here is a summary of each section:

Non-verbal Reasoning (NVR): This evaluates a student's ability to understand and analyse visual information. It involves solving problems using transformed shapes, patterns, and figures.

Verbal Reasoning (VR): This assesses a student's ability to engage with language, understand concepts, and process written information. It involves identifying relationships between words and understanding analogies.

Quantitative Reasoning (QR): This measures a student's numerical reasoning ability. It includes tasks that involve number sequences and understanding mathematical relationships.

Spatial Ability (SA): This assesses a student's ability to think about shapes and space. It involves visualising and manipulating 2D shapes and spotting shapes in more complex diagrams.



Why CAT4 matters

CAT4 helps schools see **how a child thinks and learns**, not just what they've been taught. It gives a standardised profile across **Verbal, Quantitative, Non-verbal and Spatial** reasoning, which schools use to make better decisions for pupils.

Baseline & early insight. Many schools sit CAT4 at the start of a year to set a **baseline** for the cohort. The profile highlights **strengths and areas for support**, so teachers can adapt teaching and plan interventions early.

Setting/streaming. Results are often one input into **class placement** (e.g., maths sets), alongside teacher judgement and other data. A strong CAT4 performance can mean access to **greater stretch**, while specific patterns may trigger **targeted support**.

Admissions context. Many independent and grammar schools include CAT4 in their **Year 7 admissions** process or ask for **recent CAT4 scores** as part of applications, using the profile to understand potential and likely classroom fit.

Ongoing progress conversations. Because CAT4 focuses on **ability rather than attainment**, schools and parents can use it to discuss whether day-to-day results are **in line with potential**, and where extra practice or enrichment could help.

International use. CAT4 is also used widely in **international schools**, so families moving schools may find the profile helpful when sharing information with a new setting.

In short, CAT4 scores can influence **class placement**, the **support and stretch** your child receives, and, in some schools, **admissions decisions**. Understanding the test and preparing effectively and calmly can help children show what they can do on the day.



How is the CAT4 delivered and assessed?

The CAT4 is structured into different levels aimed at specific age groups to ensure the appropriateness of the test content and difficulty. Here's a breakdown of the levels and the corresponding age groups they target:

Age range	CAT4 level	England & Wales	Scotland	Northern Ireland	Ireland
6:00 - 7:11	X	Y2	P3	Y3 (P3)	1st class
7:01-8:11	Y	Y3	P4	Y4 (P4)	2nd class
6:06-8:11	Pre-A	Y3	P4	Y4 (P4)	2nd class
7:06 - 9:11	A	Y4	P5	Y5 (P5)	3rd class
8:06-10:11	B	Y5	P6	Y6 (P6)	4th class
9:06 - 11:11	C	Y6	P7	Y7 (P7)	5th class
10:06 - 12:11	D	Y7	S1	Y8 (F1)	End of 5th class/6th class
11:06 - 13:11	E	Y8	S2	Y9 (F2)	End of 6th class/ 1st Year
12:06 - 15:11	F	Y9 & Y10	S3 & S4	Y10 & Y11 (F3 & F4)	2nd and 3rd Year
14:06 - 17:00+	G	Y11+	S5 & S6	Y12+ (F5+)	4th/TY/5th Year



The test consists of multiple-choice questions spread across four sections (called 'batteries' by GL Assessment): **Verbal Reasoning, Non-verbal Reasoning, Quantitative Reasoning, and Spatial Ability.**

The exact format and timings of the CAT4 test can vary slightly depending on the school and the level being administered, but here's a general overview of what to expect:

CAT4 Digital Levels A to G	Test time*	Approximate time needed for instructions, examples and practice items	Approximate length of test session
Part 1			
Figure Classification	10 minutes	5 minutes	30 minutes + settling time
Figure Matrices	10 minutes	5 minutes	
Part 2			
Verbal Classification	8 minutes	5 minutes	41 minutes + settling time
Verbal Analogies	8 minutes	5 minutes	
Number Analogies	10 minutes	5 minutes	
Part 3			
Number Series	8 minutes	5 minutes	41 minutes + settling time
Figure Analysis	9 minutes	5 minutes	
Figure Recognition	9 minutes	5 minutes	

At the time of writing these are the number of questions, with timings, to be completed in each subtest.

Figure Classification	24 questions	10 minutes
Figure Matrices	24 questions	10 minutes
Verbal Classification	24 questions	8 minutes
Verbal Analogies	24 questions	8 minutes
Number Analogies	18 questions	10 minutes
Number Series	18 questions	8 minutes
Figure Analysis	18 questions	9 minutes
Figure Recognition	18 questions	9 minutes

In many cases the assessment is delivered in a single session with breaks between each part.

However, in some schools the different Parts (1, 2 and 3) can be delivered on separate days, so it is always advisable to check with the school or test centre beforehand to clarify the exact format of the assessment.

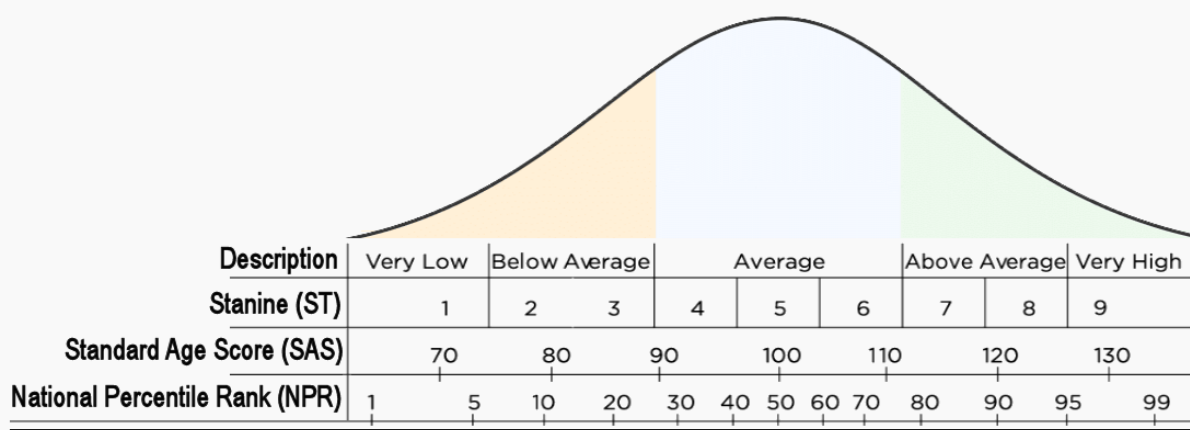


How the CAT4 is scored (in plain English)

Age-standardised score (SAS): Your child's raw marks are adjusted for **age (in years and months)** and compared with a large UK sample. The average SAS is **100**. Higher than 100 = above the national average for their age; lower than 100 = below. Schools use SAS because it's the fairest like-for-like comparison.

Percentile (NPR): Shows the **percentage of same-age pupils who scored lower**. For example, a **78th percentile** means your child scored better than 78 out of 100 peers.

Stanine (1–9): A simple banding of the SAS. **5** is average; **7–9** above average; **1–3** below. Schools often use stanines for a quick visual profile.



Four batteries + overall: CAT4 reports separate scores for **Verbal, Quantitative, Non-verbal, Spatial** and an **overall mean (average) SAS**. The **pattern across the four** helps schools spot strengths and areas to support (e.g., strong Spatial, lower Verbal).

What schools do with the scores: Results are commonly used for **baseline understanding, setting/streaming**, and to inform **teaching and support**; some independent schools consider CAT4 within **Year 7 admissions**.

Tip for parents: consistent practice with CAT4-style questions improves **familiarity and timing**, helping children show what they can do on the day.



Sample questions

In this section we review the four batteries and sub-tests and give examples of questions from each. The examples are taken from our comprehensive CAT4 preparation course. All our questions are unique and are not found elsewhere.

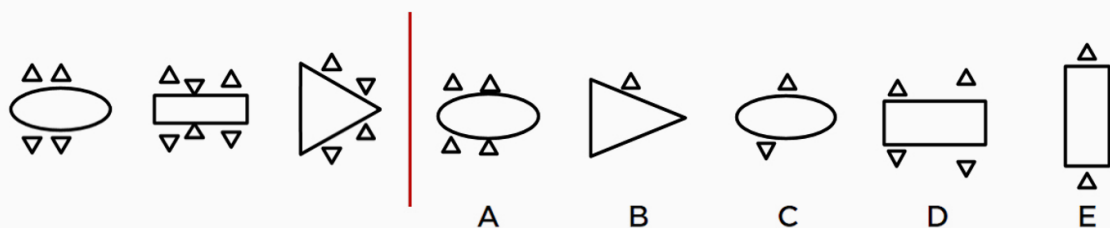
Non-verbal Reasoning

The **Non-verbal Reasoning (NVR)** section of the CAT4 is designed to assess a student's ability to analyse and solve problems without relying on verbal language skills. This section focuses on the student's capacity to understand, interpret, and logically think through new information presented visually. There are two types of questions that will be covered in this part of the assessment: **figure classification** and **figure matrices**.

Figure Classification

In these questions students are presented with three images which share some common feature or characteristic. They then must choose a fourth image with similar properties from a group of five possible answers.

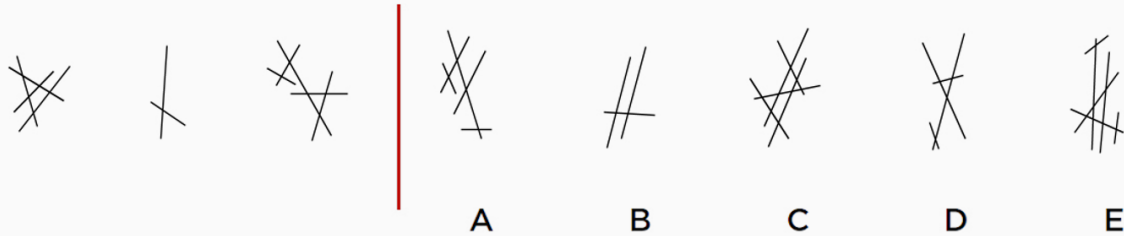
Example 1



In this question the correct **answer is shape D**. This is because all the starting shapes have horizontal symmetry and shape D is the only shape to preserve this feature from the options.



Example 2



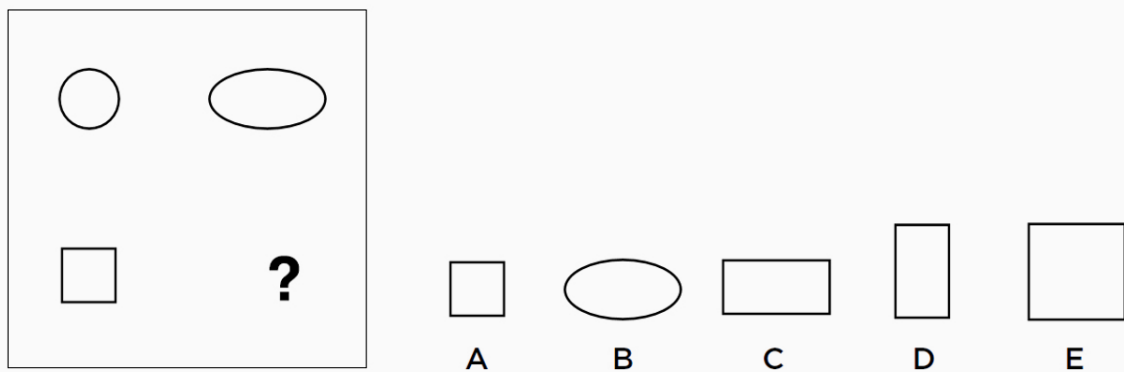
In this question the correct **answer is shape E**. This is because all the starting shapes have an odd number of points of intersection (5, 1 and 5 respectively). Shape E is the only shape with an odd number of points of intersection (7), and the others have an even number.

It is important to note here that the number of lines in the shapes to the left (4, 2 and 5 respectively) does not follow a pattern, so ignore it and focus on the feature that does show a clear pattern.

Figure Matrices

In these questions students are presented with a matrix (grid) of shapes with a pattern linking the top two shapes together. They must then select the correct shape that goes in the missing part of the grid that follows the same pattern.

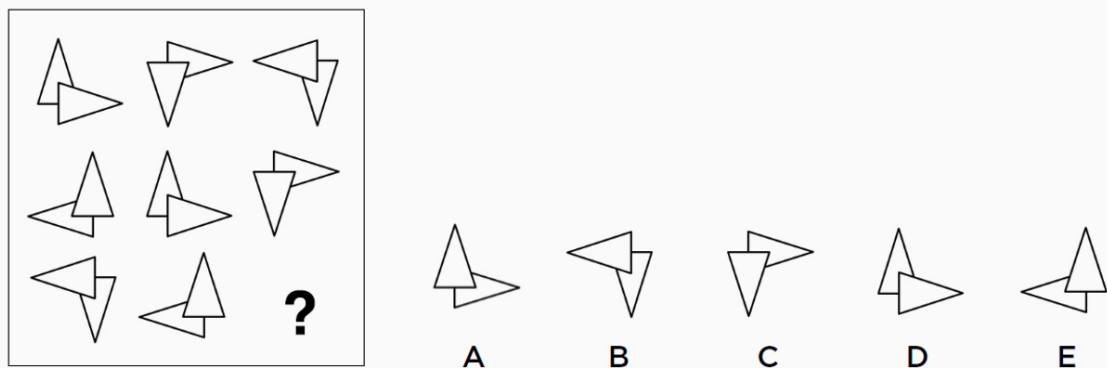
Example 1



The correct **answer is shape C**. This is because the shape in the top right of the matrix is a horizontal stretch of the shape in the top left. Note that it is only stretched horizontally and not vertically.



Example 2



The correct answer is shape D. This is because each shape has been rotated 90° clockwise moving from left to right in each row of the matrix. The student needs to pay attention to which triangle is 'on top' and make sure they select the correct shape matching pattern of rotation plus keeping the triangles in the correct position.

Non-verbal Reasoning depends on **recognising patterns in shapes and figures**. Focused preparation builds that recognition.

We've identified 12 different question types for *figure classification* and 11 different types for *figure matrices*.

Our courses cover all of these question types with step-by-step explanations and targeted practice, so students have no surprises on test day.



Verbal Reasoning

The **Verbal Reasoning (VR)** section of the CAT4 assesses a student's ability to understand, analyse, and engage with language. This section is crucial for gauging a student's verbal skills, which are fundamental for most academic subjects and essential for effective communication, comprehension, and learning across the curriculum.

There are two types of questions that will be covered in this part of the assessment: **verbal classification** and **verbal analogies**.

Verbal Classification

In these questions, three words are presented to the student that are similar in some way. The student then must choose a fourth word that has similar properties.

Example 1

harp cello violin

A instrument **B** music **C** guitar **D** strings **E** orchestra

These are connected nouns, and the correct word is **guitar** since they are all examples of stringed instruments. The student needs to be careful here and make sure they select an example of a stringed instrument and not the group they all belong to e.g. instrument or strings.



Example 2

 speak talk chat

A dialogue B friend C whisper D converse E shout

The correct word here is **converse**. These are verb synonyms. The student needs to be careful here not to choose whisper or shout which are loosely connected verbs. “Speak, talk, chat” all mean **to have a conversation** without adding anything about **volume** or **force**. “Whisper” and “shout” are **ways of speaking** that add an extra condition (very quiet / very loud), so they don’t match the neutral meaning of the set.

Quick tip: If you can swap it into a sentence like “Let’s ____ after lunch” and it still reads naturally, you’ve probably got it right:

- “Let’s converse after lunch.” ✓
- “Let’s whisper/shout after lunch.” ✗



Verbal Analogies

A pair of connected words is given to the student along with a single word. The student must work out the connection between the pair of words and select the correct missing word from a choice of five.

Example 1

angry → furious: scared →

A calm B anxious C terrified D fearless E nervous

The answer here is **terrified**. “Angry → furious” shows a **degree/intensity** relationship: *furious* is a **stronger** form of *angry*. So, we need a word that is a **stronger** form of *scared*. That is **terrified**.

Quick tip: When you see a pair like *X → very X*, look for the option that means “**very X**” for the second word.

Example 2

we → us: who →

A whom B they C them D purchase E bought

The correct answer is **whom**. “We → us” changes a **subject pronoun** to its **object form**. “Who → whom” is the same change: **subject** to **object**. Students should be careful as **they → them** would match the pattern, but the pair starts with **who**, not **they**.

VR includes several distinct question types, and we’ve identified 12 different types of questions for *verbal classification* and 13 different types in *verbal analogies*, so **familiarity is essential**. Our lessons explain each type clearly and give practical tips, so pupils recognise the patterns quickly and secure marks quickly in the real test.



Quantitative Reasoning

The **Quantitative Reasoning (QR)** section of the CAT4 is designed to assess a student's ability to use numerical skills to solve problems. This section focuses on understanding numerical concepts, performing calculations, and applying quantitative logic to reason through various scenarios. It's crucial for gauging a student's potential in mathematics and other numerically based subjects.

There are two types of questions that will be covered in this part of the assessment: **number analogies** and **number series**.

Number Analogies

In these questions two pairs of related numbers are presented. The student must work out what the numerical relationship is, then choose from five numbers to complete a third pair.

Example 1

[15 → 12] [7 → 4] [8 →] A 1 B 6 C 10 D 5 E 4

In this question the correct answer is **5**. This is because in the first two pairs the second number is the first number subtract 3. So, in the third pair we are looking for 8 subtract 3 which is 5.



Example 2

[2 → 7] [3 → 10] [4 →] A 9 B 10 C 11 D 12 E 13

Here the correct answer is **13**.

Initially the student might think that the progression from one number to the next is +5 but a quick check of the second pair shows that this is not true. We can't multiply 2 by a whole number to get 7 so this is a question combining operations.

Quick tip: Start by getting as close to the number as possible with a multiplication so:

$$2 \times 3 = 6 \text{ or } 2 \times 4 = 8$$

Then see what you have to add or subtract to get the correct answer so:

$$2 \times 3 + 1 = 7 \text{ or } 2 \times 4 - 1 = 7$$

Then check both patterns with the second pair of numbers so:

$$3 \times 3 + 1 = 10 \text{ or } 3 \times 4 - 1 = 11$$



This is the correct pattern, so we apply this to find the final answer:

$$4 \times 3 + 1 = 13$$



Number Series

Here the student is presented with a series of number that follow some kind of pattern. The student must work out what that pattern is and then choose the correct value that continues the series.

Example 1

14 27 40 53 → A 46 B 56 C 66 D 76 E 78

Here the correct answer is **66**. That is because we are adding 13 to each term as we progress through the series, so the next number is $53 + 13 = 66$.

Example 2

13 23 16 19 19 → A 23 B 15 C 18 D 11 E 19

Here the correct answer is 15. This is a pair of sequences combined. One sequence is 13, 16, 19 (+3 each term) and the other sequence is 23, 19, →. This second sequence is -4 each term and so we are looking for $19 - 4 = 15$.

QR rewards **practice and pattern-spotting**. For example, multiplication or division in *number analogies* and double sets or squares in *number series*. We've identified 10 different question types in *number analogies* and 10 different types in *number series*. By familiarising themselves with each question type in advance, students learn the quickest approaches and avoid common traps, maximising their score on the day.



Spatial Ability

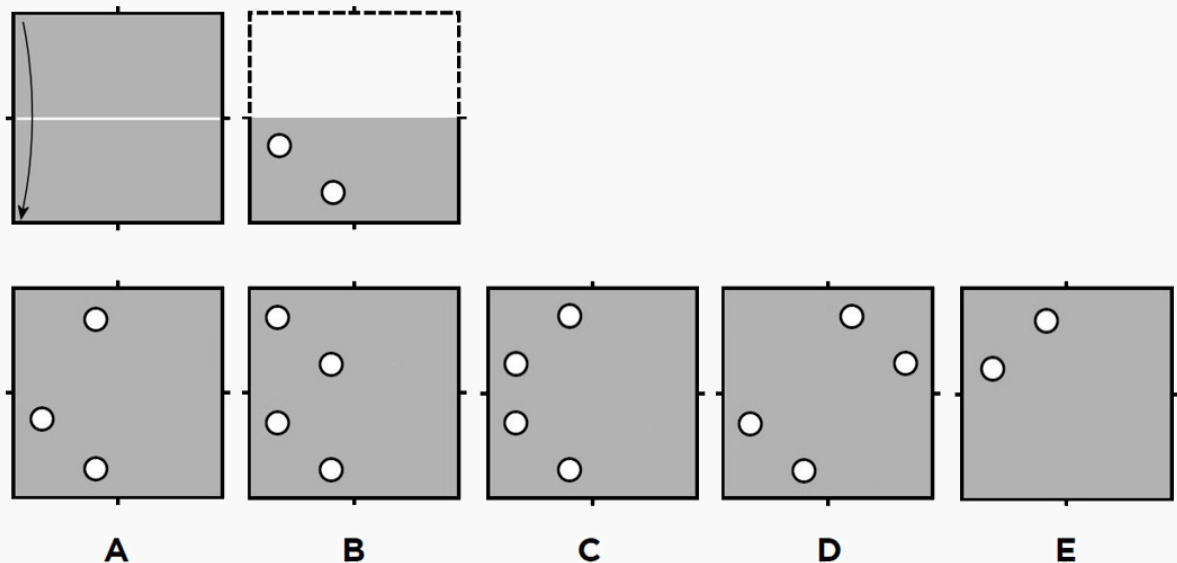
The **Spatial Ability** section of the CAT4 evaluates a student's capacity to think about objects in two and three dimensions and to solve problems involving spatial relationships. This section tests the ability to visualize and manipulate shapes, figures, and patterns, a skill set that is crucial for success in fields such as engineering, architecture, art, design, and the sciences.

There are two types of questions that will be covered in this part of the assessment: **figure analysis** and **figure recognition**.

Figure Analysis

In these questions a series of figures show a square being folded repeatedly and then punched through with holes. The student must choose the shape which represents what the square would look like, complete with holes, when unfolded.

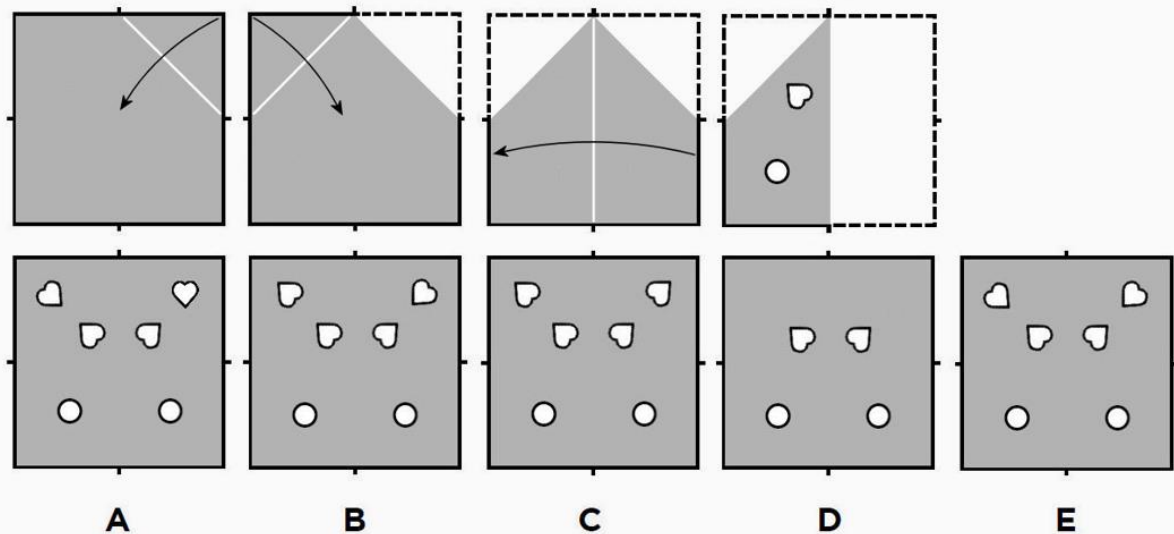
Example 1



The correct answer here is **C**. There is a single horizontal fold across one half of the paper. Students should see this single fold as a symmetry line and determine the correct position of the punched holes above like in a mirror.



Example 2



The correct answer here is **E**.

A good approach here is to work backwards and 'unfold' each part step by step.

Initially, in the first step back, unfolding the paper (vertical half fold) will reveal pattern D with vertical symmetry.

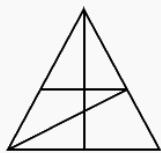
However, when each corner is then unfolded the heart shaped holes will appear in each corner of the final shape symmetrical along the diagonal corner folds revealing the pattern in option E.



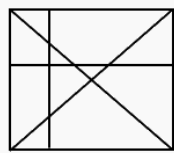
Figure Recognition

Here several composite shapes are presented along with a target shape. The student must identify which of the composite shapes contain the target shape. At this level, the target will not be rotated or changed in any way, so the student is looking for the exactly same shape in the answer.

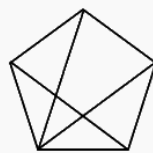
Example 1



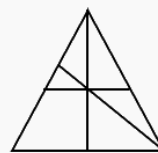
A



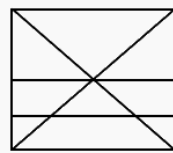
B



C



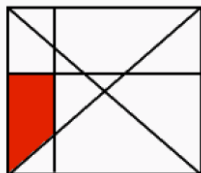
D



E



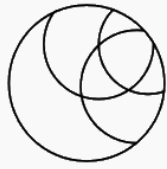
The answer is B as demonstrated below.



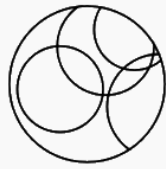
Students should identify distinctive features to look for in the composite shapes. For example, the target shape has a horizontal-vertical right angle in the top left-hand corner. Looking for similar right angles in the composite shapes can make spotting these easier.



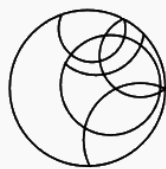
Example 2



A



B



C



D



E



Here the correct answer is E as shown below.



Student should be careful to match the exact size, shape and orientation of the target shape in the composite image.

Success in SA comes from **familiarity with the task types** and steady rehearsal. We have identified 10 different question types in *figure analysis* and 10 different types in *figure recognition*. Our materials walk pupils through each type of question, then give timed practice so they can apply the right strategy with confidence and have no surprises on test day.



How our course can help your child

Purpose-built for CAT4

Many providers reuse generic reasoning questions across different products. We focus on CAT4 only and reverse-engineer our questions from the actual test, so they are extremely accurate in terms of the format, difficulty and timing of the real CAT4. We also work with a network of experienced UK educators who review every question so the materials match CAT4 style and level and remain child-friendly and accessible.

Evidence-based learning

Using the latest research on effective learning for children our short, focused videos (<10 mins) and immediate practice keep children engaged, build one skill at a time, and improve recall. Practice and familiarity then develop pacing, stamina, and exam confidence.

Structure of the course

We cover all four CAT4 batteries (VR, QR, NVR, SA) each split into two modules, like the real test.

- Modules: Clearly labelled question categories help students to know exactly what they're learning and recognise patterns fast.
- Micro-lessons: Short video explanations with 3–4 worked examples, and simple tactics make learning easier.
- Guided practice: Two practice items (one easy, one harder) for each category lock in learning while it's fresh.
- Spot-the-pattern drill: Mixed, untimed tests at the end of each module help students practise their skills and apply the right strategy.
- Section mock: Each section finishes with a timed mini-mock to develop pace and confidence.
- Full mocks: The full course is rounded out with a full mock exam, so students practise all they have learnt in the course.



Real results

Our CAT4 pupils have seen an average increase of 18 SAS points ($\approx 13\%$) often moving from **above average** into the **very high** range. Better scores influence Head's recommendations, references to selective schools and class setting.

Flexible Learning & Access

- Students receive **12 months' full access**, aligning with their CAT4 window, so they can revisit materials as needed.
- Fully **self-paced**, allowing students to study at their convenience while benefiting from interactive components.

This course is designed to give students **the best possible preparation for the CAT4**, equipping them with the knowledge, skills, and confidence to **achieve top scores**.

7-day money-back promise

We know our courses deliver real results. So, we are confident enough for you to try the course for a week. If it's not the right fit for your child, email us for a full refund. This offer is only valid if less than 20% of the course materials have been accessed.

Contact Us for More Information



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