

# Understanding the CAT4 assessment and reports



# What is CAT4?

CAT4: Cognitive Abilities Test Fourth Edition

CAT4 assesses a student's abilities across four different reasoning areas:

Verbal reasoning – thinking with words

Quantitative reasoning – thinking with numbers

Non-Verbal reasoning – thinking with shape

Spatial reasoning – thinking with space and shape

**It is important to note that this is an assessment of ability and not attainment**

# Ability vs. Attainment

## Cognitive Abilities Test

- Requires no preparation
- Assesses regardless of previous teaching and schooling
- Gives an indication of the ability of a student to learn
- Used at the beginning of the academic year to ensure appropriate support and intervention is in place

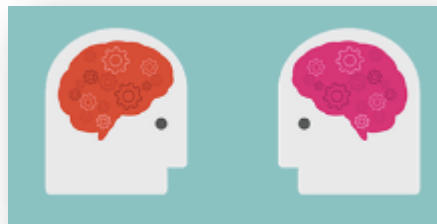
## Attainment Testing

- Often requires revision and practice
- Assesses skills and content knowledge that have been taught
- Gives an indication of what has been learnt
- Used at the end of teaching modules to track progress and identify whether any gaps in knowledge or skills are present

**CAT4 Measures Ability**

# What is CAT4 used for?

- Identifying academic potential
- Understanding how a student thinks
- Determining where further support may be necessary
- Highlighting any possible barriers to learning
- Setting learning targets
- Providing feedback to the teacher, to the student and to the parent



# Verbal Reasoning

## Your turn...

### Verbal Classification

happy sad frightened

tall

feel

think

new

angry

### Verbal Analogies

cow → milk : chicken →

feather

dinner

egg

hen

bird

# Quantitative Reasoning

## Your turn...

### Number Analogies

Practice 1

[ 5 → 4 ] [ 8 → 7 ] [ 3 → ? ]

1

2

3

5

6

### Number Series

Practice 1

5 10 15 20 →

25

30

35

40

45

# Non-Verbal Reasoning

## Your turn...

### Figure Classification

Practice 1



Five boxes labeled A through E, each containing a different shape. Box E is highlighted with a purple border.

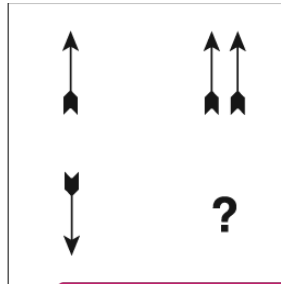
- A: A semi-circle with no hatching.
- B: A circle with horizontal hatching.
- C: A rectangle with horizontal hatching.
- D: An oval with diagonal hatching.
- E: A semi-circle with horizontal hatching.

### Figure Matrices

Practice 1

Choose your answer by clicking on it with the mouse.

If you want to change your mind, just click on your new answer choice.



Five boxes labeled A through E, each containing a different arrangement of arrows. Box C is highlighted with a purple border.

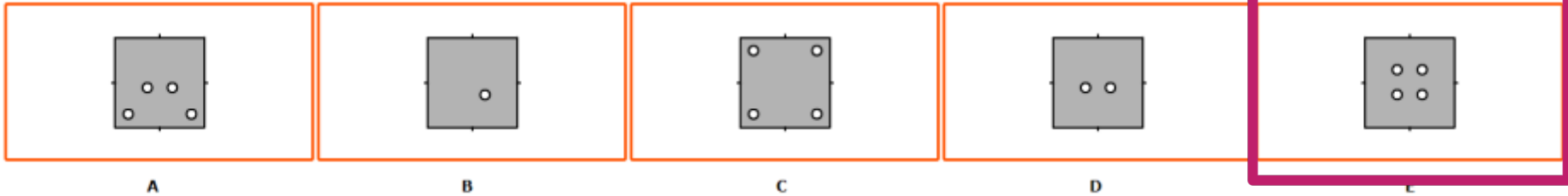
- A: Two horizontal arrows pointing left, one above the other.
- B: Two horizontal arrows pointing right, one above the other.
- C: Two vertical arrows pointing down, one slightly to the right of the other.
- D: Two vertical arrows pointing up, one slightly to the right of the other.
- E: Two vertical arrows pointing up, one above the other.

# Spatial Reasoning

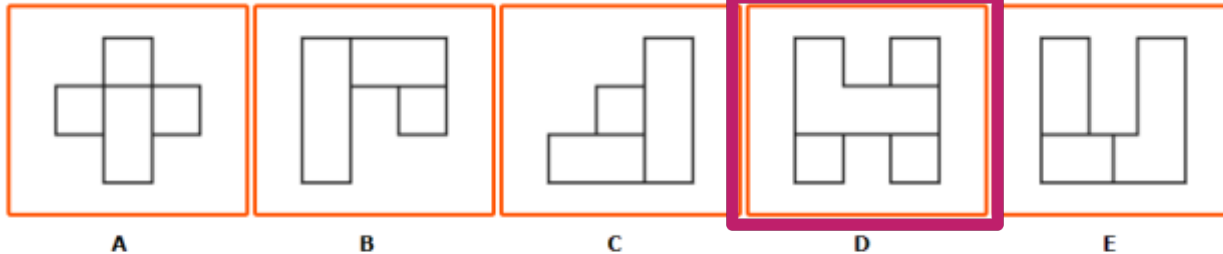
## Your turn...

### Figure Analysis

Practice 1



### Figure Recognition







# What is Spatial Reasoning?

The ability to generate, retain and manipulate abstract spatial images”, Lohman (1979)



# What is Spatial Reasoning?

<b>Strengths</b> <ul style="list-style-type: none"><li>• Science</li><li>• Technology</li><li>• Engineering</li><li>• Mathematics</li><li>• Creative Arts</li></ul>		<b>Visual thinkers:</b> <ul style="list-style-type: none"><li>• Strong spatial concepts</li></ul>	<b>Weaknesses (perceived)</b> <ul style="list-style-type: none"><li>• Literacy</li><li>• Oral communication</li><li>• Detail</li><li>• Handwriting</li></ul>		<b>Verbal thinkers</b> <ul style="list-style-type: none"><li>• Detail</li><li>• Handwriting</li></ul>
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Students with good spatial reasoning ability have a high potential in subjects such as Science, Technology, Engineering, Mathematics and the Creative Arts.

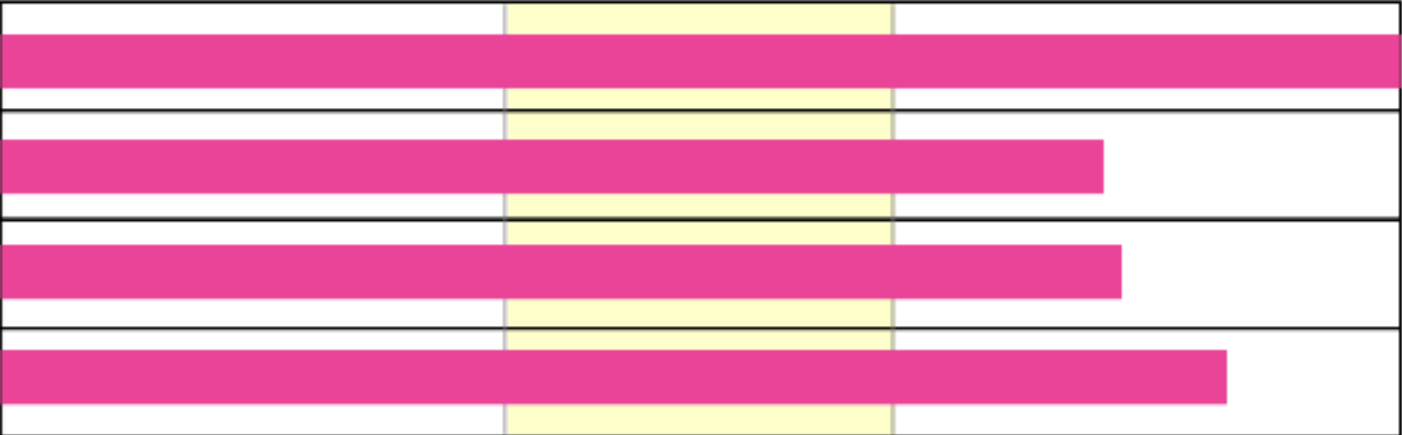
These subjects are important for the future career prospects of our students.

# Verbal Reasoning

- Verbal reasoning is the ability to think with words.
- The verbal reasoning battery is the only battery that is influenced by students' English language skills.
- Students who do not have English as a first language may find their verbal score to be lower than the other batteries.
- As verbal reasoning can be influenced by schooling, students can improve their verbal score by improving their English language skills.
- There will be strategies suggested in your Parent Report that will guide how you can support your child with their verbal reasoning skills at home.

# Understanding the Reports

The yellow band highlights where the “average” scores lie.

Verbal	
Quantitative	
Non-verbal	
Spatial	

This student has scored above average in every battery.  
This tells us that this student is highly able across all four reasoning skills.

# Understanding the Reports

The summary provides commentary on the results from the CAT4 assessment and gives some guidance about strategies you can use at home to support your child.

## Summary

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Jessica's profile of scores from *CAT4* shows she has a clear preference for learning by reading, writing and talking about topics but odd spatial skills will mean that she can learn effectively in a number of different ways.

- Jessica may find that she gets ahead very quickly in some subjects and so needs extra work that allows her to do more research or read around a subject or follow her own interests. As some students may be reluctant to ask for this, do encourage Jessica to approach the teachers.
- Jessica will learn best when working step-by-step through a subject or task.
- Encourage Jessica to read widely outside school. Reading from a range of different types of books will add to her knowledge and skills.
- Think about activities outside school that build on her abilities, for example debating, drama or science club. She may enjoy these if she is not already taking part.