

Non-Verbal Reasoning Challenge with Max the Monkey

Learning objective: To develop spatial awareness, pattern recognition, and logical deduction skills suitable for Grade 4 pupils.

Use these flashcards to test your ability to spot patterns and sequences. Read the front of the card, then check the back to see if you correctly identified the rule or the next shape in the sequence.

What is a 90-degree clockwise rotation?

Turning a shape one quarter-turn to the right, like the hands of a clock.

If a shape is reflected, what happens to it?

It creates a mirror image of the original shape across a line of symmetry.

Max the Monkey sees a sequence: Triangle, Square, Pentagon, Hexagon. What is the next shape?

A Heptagon (a 7-sided shape).

What does 'horizontal symmetry' mean?

The shape can be divided by a horizontal line so that the top and bottom halves are identical reflections.

If a shaded square moves from the top-left to the bottom-left, what is the transformation?

A vertical translation (a slide) downwards.

How much does a shape turn in a half-turn?

180 degrees.

What is an 'odd one out' question in non-verbal reasoning?

A task where you must identify which shape does not share the same rules, patterns, or properties as the others in the group.

What is the difference between clockwise and anti-clockwise?

Clockwise moves in the direction of clock hands; anti-clockwise moves in the opposite direction.

If a pattern follows: circle, star, circle, star... what is this called?

An alternating sequence.

In a 3D rotation, what remains the same about the object?

Its physical properties, such as the number of faces, edges, and vertices remain unchanged.

What is a 'net' in reasoning?

A 2D pattern that can be folded to make a 3D shape.

If a shape is flipped over a diagonal line, what is this called?

A diagonal reflection.