Max’s Mind-Bending Pattern Challenge

Learning objective: To develop spatial awareness and logical deduction skills by identifying sequences, rotations, and relationships between shapes.

Max the monkey is obsessed with patterns! Look closely at each question to spot the logic. For multiple-choice questions, choose the letter that best completes the sequence or fits the rule.

Answer Key: 1.C, 2.True, 3.Clockwise, 4.B, 5.False, 6.D, 7.A, 8.Reflection, 9.C, 10.True.

Word bank: Rotation · Sequence · Symmetry · Reflection · Orientation · Pattern

1. 1. Which shape comes next in the sequence: Square, Pentagon, Hexagon, ...? A) Triangle B) Octagon C) Heptagon* D) Circle (1 mark)

2. 2. True or False: If a shape is rotated 360 degrees, it returns to its original orientation. True*/False (1 mark)

3. 3. If a clock hand moves from 12 to 3, what direction is it turning? (1 word) (1 mark)

4. 4. Which image is a mirror reflection of a capital letter 'L'? A) L B) ■* C) ■ D) 7 (1 mark)

5. 5. True or False: A scalene triangle always has at least one line of symmetry. True/False* (1 mark)

6. 6. Max has a pattern: Star, Circle, Star, Circle. What is the 5th shape? A) Circle B) Square C) Triangle D) Star* (1 mark)

7. 7. If a square is shaded on the top half, then rotated 180 degrees, where is the shading now? A) Bottom half* B) Top half C) Left half D) Right half (1 mark)

8. 8. What do we call a pattern that is exactly the same on both sides of a central line? (1 word) (1 mark)

9. 9. Identify the odd one out: A) Square B) Rectangle C) Circle* D) Rhombus (1 mark)

10. 10. True or False: A 90-degree turn is a quarter turn. True*/False (1 mark)

Draw: Draw a complex shape on a piece of grid paper and then draw its reflection on the other side of a vertical line to demonstrate symmetry.

Extension challenge: Max has 5 shapes: a triangle, a square, a pentagon, a hexagon, and a heptagon. If he arranges them by the number of sides, how many sides would the 10th shape in his sequence have?