Max’s Magnificent Pattern Puzzle

Learning objective: To develop logical thinking and pattern recognition skills through visual reasoning, consistent with Year 3 mathematical reasoning development.

Max the monkey has been busy creating puzzles! Read each question carefully, look at the patterns, and choose the correct answer. Good luck!

Answer Key: 1.C, 2.True, 3.Square, 4.B, 5.False, 6.Rotate, 7.A, 8.True, 9.Triangle, 10.B

Word bank: Sequence · Rotate · Reflect · Pattern · Logical

1. 1. Max has a sequence: Circle, Square, Circle, Square. What comes next? A) Triangle B) Rectangle C) Circle D) Oval (1 mark)

2. 2. True or False: If a shape is rotated 90 degrees, it has changed its size. (1 mark)

3. 3. If a pattern goes: Small triangle, Big triangle, Small triangle... what shape would you use to start a new pattern that goes: Small square, Big square? (1 mark)

4. 4. Which shape does not belong in this group? A) Square B) Circle C) Rectangle D) Hexagon (All have straight sides except one). (1 mark)

5. 5. True or False: A reflection of a shape looks exactly the same as the original shape, just flipped. (1 mark)

6. 6. Fill in the blank: To turn a shape around a central point, we _____ it. (1 mark)

7. 7. Which of these is a repeating pattern? A) Up, Down, Up, Down B) Up, Up, Down, Left C) Up, Left, Down, Right D) Up, Down, Left, Up (1 mark)

8. 8. True or False: A pattern can be made using only colours. (1 mark)

9. 9. Max has: 1 dot, 2 dots, 3 dots. What is the next shape if the dots are inside a...? (1 mark)

10. 10. Look at this sequence: £1, £2, £4, £8. What is the rule? A) Add £2 B) Double the amount C) Add £3 D) Subtract £1 (1 mark)

Draw: Draw a repeating pattern using three different shapes and two different colours. Show Max the monkey exactly how your pattern works!

Extension challenge: Create your own 'odd one out' puzzle for a friend. Draw four shapes, but make one different from the others because of its size, colour, or number of sides.