

Max's Pattern-Solving Challenge

Learning objective: To develop logical thinking and pattern recognition skills by analysing sequences and spatial relationships.

Max the monkey has found a series of mysterious shapes and symbols in the jungle. Your task is to act as a pattern detective. Use the boxes below to describe the rules of the sequences and draw the next logical step in each pattern. Look closely at how the shapes rotate, grow, or change color.

Word bank: rotation · sequence · symmetry · clockwise · anticlockwise · pattern · increase · reflection · logical · missing

1. Sequence Analysis: Describe the rule for the pattern shown in the first set. Does the shape rotate, change size, or flip? (2 marks)

2. The Missing Link: Based on the rule you identified above, describe exactly what the next shape in the sequence should look like. (2 marks)

3. Spatial Reasoning: If the shape was reflected along a vertical line, how would its appearance change? Explain your reasoning. (3 marks)

4. Odd One Out: Imagine four shapes. Three follow a strict rule, and one does not. Describe how you would spot the 'odd' shape. (2 marks)

5. Create Your Own: Write a set of instructions for a friend to create a pattern that increases in complexity using rotation. (3 marks)

Extension challenge: Try to create your own sequence of five shapes on a separate piece of paper. Use a 'rotation of 90 degrees clockwise' rule and see if a partner can guess the sixth shape in your pattern!