

Max's Pattern Puzzles: A Non-Verbal Reasoning Challenge

Learning objective: To identify, continue, and complete sequences of shapes and patterns using logic and spatial awareness.

Help Max the monkey solve these spatial puzzles. Look closely at how the shapes rotate, change colour, or grow. Choose the option that completes the pattern logically.

Max loves to find patterns in the jungle. Whether he is looking at the leaves on a tree or the way the river bends, he sees maths everywhere! Today, Max has found a set of mysterious tiles. Each tile follows a strict rule. To solve the puzzles, you must look for the pattern in the shapes, colours, or the direction they are facing. Remember, Max says: 'Look at the whole picture before you choose your path!'

Word bank: Rotation · Sequence · Symmetry · Pattern · Clockwise · Reflection · Geometric

1. In a sequence, a square rotates 90 degrees clockwise in every step. If the first shape has a dot in the top-right corner, where will the dot be after two turns? (2 marks)

2. Look at this pattern: Triangle, Square, Pentagon, Hexagon. What is the rule for this sequence and what would the next shape be? (2 marks)

3. If a shape is reflected across a vertical line of symmetry, how does its appearance change? Explain in your own words. (2 marks)

4. Max has a pattern of three circles: one small blue, one medium green, one large red. If the pattern repeats, what colour and size will the fifth circle be? (2 marks)

5. Why is it important to count the number of sides on a shape when trying to solve a non-verbal reasoning puzzle? (2 marks)

Draw: Draw a sequence of three shapes that grow in size and rotate 45 degrees each time.
Show Max the monkey standing next to your pattern.



Extension challenge: Create your own 'Odd One Out' puzzle using four different geometric shapes. Draw them in the space below and write a sentence explaining why one of them does not fit with the others.