

Symmetry Superstars with Max the Monkey

Learning objective: To identify and draw lines of symmetry in 2D shapes and complete symmetrical figures with respect to a specific line.

Read each question carefully. Use a ruler for all drawing tasks and ensure your lines of symmetry are accurate.

Max the Monkey is busy organising his collection of geometric shapes. He knows that a shape has a line of symmetry if it can be folded along a line so that the two halves match exactly. Help Max solve these symmetry puzzles!

Word bank: Symmetry · Line of symmetry · Reflection · Vertex · Horizontal · Vertical · Diagonal

1. Max has a regular pentagon. How many lines of symmetry does a regular pentagon have? Explain how you found your answer. (2 marks)

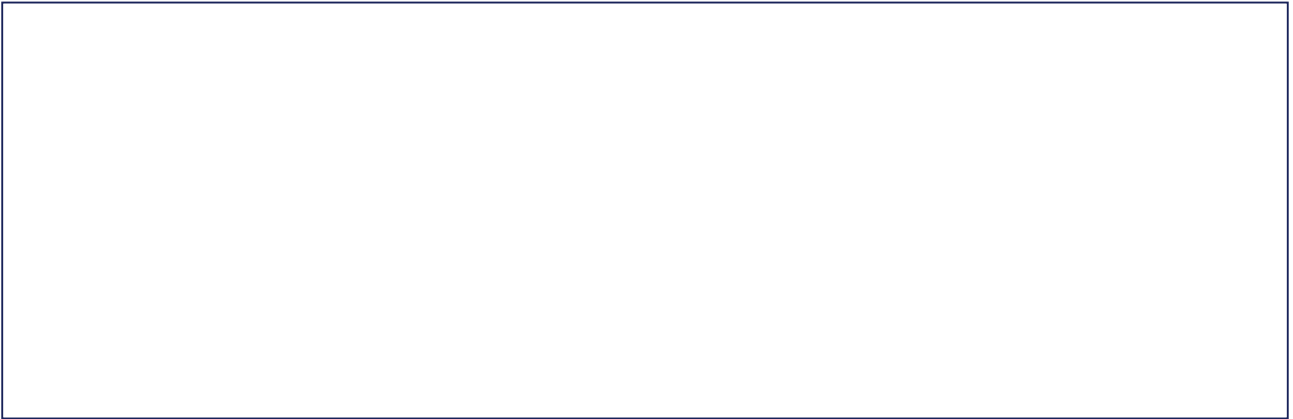
2. Draw a rectangle on your paper. Use a ruler to draw all the possible lines of symmetry on it. How many lines did you find? (2 marks)

3. A parallelogram is drawn on a grid. Does it have any lines of symmetry? Justify your answer by describing what happens if you try to fold it. (2 marks)

4. If a shape has a vertical line of symmetry, and the left side has a triangle 3cm away from the line, where must the corresponding triangle be on the right side? (1 mark)

5. Max has a shape with 6 lines of symmetry. What 2D shape is he likely holding? (1 mark)

Draw: Draw a horizontal line of symmetry on a piece of paper. On the top half, draw a simple house shape. Reflect the house shape accurately across the line to the bottom half.



Extension challenge: Challenge: Investigate the alphabet. Which capital letters have at least one line of symmetry? Write a list of these letters and categorise them by whether their line of symmetry is horizontal, vertical, or both.