

Max's Shape Detective Adventure

Learning objective: To identify, describe, and classify 2D and 3D shapes, including horizontal, vertical, perpendicular, and parallel lines.

Help Max the monkey solve these geometry puzzles by looking closely at the properties of shapes and lines.

Word bank: parallel · perpendicular · vertex · horizontal · vertical · polygon · face · edge

1. Max has drawn a square. Are the opposite sides of a square parallel? Explain how you know. (2 marks)

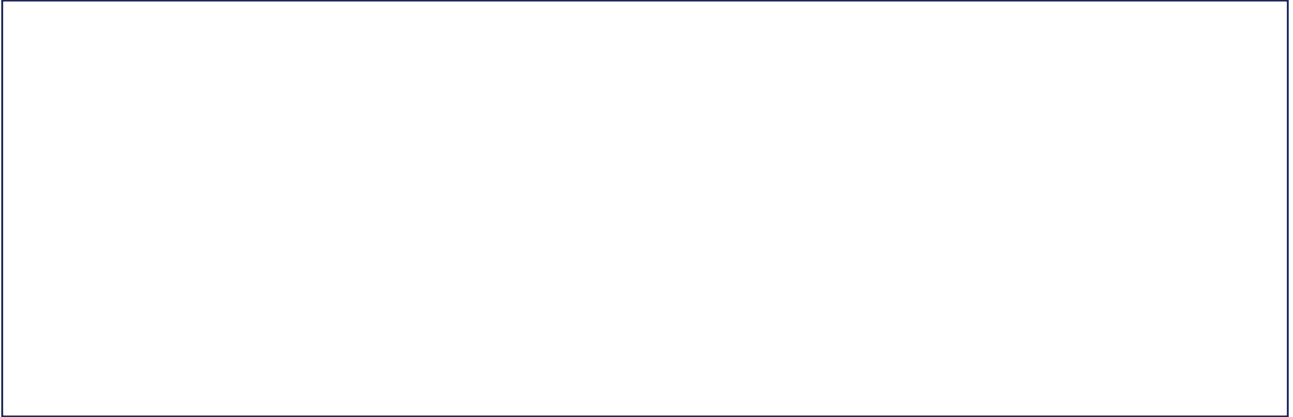
2. Look at a capital letter 'L'. Identify the type of lines used to make it. Are they horizontal, vertical, or perpendicular? (2 marks)

3. A cube has 6 faces. How many vertices (corners) does a cube have? If you are unsure, imagine holding a dice. (1 mark)

4. Max finds a shape with 3 sides and 3 vertices. What is the name of this shape, and does it have any parallel lines? (2 marks)

5. Circle the shapes below that are polygons: Circle, Triangle, Pentagon, Heart, Hexagon, Oval. (2 marks)

Draw: Draw a house using only 2D shapes. Label one horizontal line, one vertical line, and one pair of parallel lines on your drawing.



Extension challenge: Max has a collection of coins worth £1.50 in total. If he uses the coins to create a pattern, can he make a shape that has at least one line of symmetry? Explain your answer.