

Max's Geometry Shape-Finder Fact-File

Learning objective: To identify, describe, and classify 2D and 3D shapes based on their properties, including parallel and perpendicular lines and symmetry.

Max the monkey has been exploring the world to find different shapes. Use this fact-file template to record your own shape discoveries. Choose one 2D shape and one 3D shape to investigate. For each, describe its features using mathematical vocabulary like 'vertices', 'edges', 'faces', and 'lines of symmetry'.

Word bank: vertices · edges · faces · parallel · perpendicular · symmetry · polygon · quadrilateral · prism · acute · obtuse

1. 2D Shape Identity: Name your chosen 2D shape and list its properties, such as the number of sides and whether it has any lines of symmetry. (3 marks)

2. Lines Investigation: Look closely at your 2D shape. Are there any parallel or perpendicular lines? Describe where you can see them. (3 marks)

3. 3D Shape Identity: Name your chosen 3D shape and describe its features, including the number of faces, edges, and vertices. (3 marks)

4. Real-World Application: Where might you find these shapes in your classroom or at home? Give two examples. (2 marks)

5. The Comparison Challenge: How are your 2D and 3D shapes different? Write one sentence explaining why a 3D shape is not a polygon. (2 marks)

Extension challenge: Can you draw a composite shape made up of two different 2D shapes joined together? Label the vertices and identify any right angles.