Year 3 Geometry Assessment: Shapes and Angles

Learning objective: To identify, describe, and classify 2D and 3D shapes, and to recognise angles as a description of a turn.

Read each question carefully. Use your ruler for drawing tasks. Max, the maths-loving monkey, wants you to show your best work!

Max the monkey is helping his friends organise their shape collection. He needs to make sure everyone knows the difference between straight lines, turns, and 3D properties.

Word bank: Horizontal · Vertical · Parallel · Perpendicular · Right angle · Vertex · Edge · Face

1. Max has two lines. One is vertical and one is horizontal. Explain the difference between these two types of lines. (2 marks)

2. Look at a square. How many right angles does it have? How many pairs of parallel lines does it have? (2 marks)

3. Identify the 3D shape that has 6 flat faces and 12 edges. Is this shape a cube or a sphere? (2 marks)

4. If you are facing North and make a half-turn clockwise, which direction are you facing now? How many right angles make a half-turn? (3 marks)

5. Zara the zebra is drawing a pattern. She draws a shape with 3 sides and 3 vertices. What is the name of this shape? If all three sides are the same length, what is this shape called? (3 marks)

6. Compare a cylinder and a cone. Describe one similarity and one difference between these two 3D shapes using the words 'curved surface' and 'vertex'. (3 marks)

7. Max asks you to design a small park. Write a short paragraph describing the shapes you would use for the playground equipment. Explain why you chose these shapes (e.g., using properties like edges, vertices, or angles). (5 marks)

8. Draw a shape that has at least one set of perpendicular lines and label the right angle. (5 marks)

Draw: Draw a composite shape made of a rectangle and a triangle joined together. Label the vertices of the rectangle.

Extension challenge: Total: /25