

Max's Shape Safari

Learning objective: To identify, describe, and classify 2D and 3D shapes, including their properties like vertices, edges, and faces.

Read the story about Max the monkey's shape hunt, then answer the questions below. Remember to look carefully at the properties of the shapes.

Max the monkey is helping his friends tidy up the forest classroom. He loves finding mathematical patterns in everything! First, he finds a square wooden block. 'This cube has six flat faces and eight vertices,' Max observes. Next, he looks at a triangular prism used as a doorstep. He counts its five faces and nine edges. Finally, he spots a circular frisbee resting on a stump. He notes that it is a 2D shape with a curved edge and no vertices at all. Max is so happy to see how shapes help build the world around us.

Word bank: vertex · edge · face · polygon · symmetry · parallel · perpendicular

1. Max found a cube. How many faces does a cube have, and what shape is each face? (2 marks)

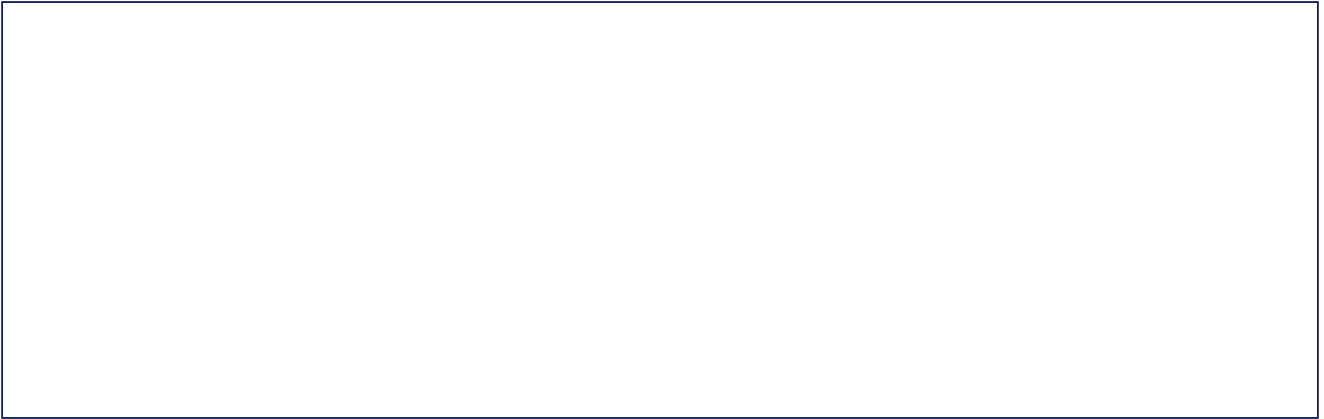
2. A circle is a 2D shape. How many vertices does a circle have? (1 mark)

3. Max counts 9 edges on a triangular prism. How many vertices does a triangular prism have? (2 marks)

4. What is the difference between a 2D shape and a 3D shape? Give one example of each. (2 marks)

5. If Max has a square and a rectangle, what is one property they both share? (1 mark)

Draw: Draw a 3D shape that has at least one circular face. Label the face and the curved edge.



Extension challenge: Max has 4 squares and 4 triangles made of wood. Can you describe how he could arrange these to create a new 3D object?