

Max's Geometric Garden Adventure

Learning objective: To identify, draw, and label 2D and 3D shapes, including regular and irregular polygons and prisms.

Max the monkey is helping build a new garden. Help him map out the structures by following the drawing steps below. Use a ruler to ensure your straight lines are accurate.

Draw: Create a clear, geometric scene on a piece of plain paper. Use a sharp pencil and a ruler. Draw a large regular hexagon on the ground plane. Next to it, draw a 3D hexagonal prism (the shed) using perspective lines. Add a right-angled triangle ornament nearby. Ensure all lines are straight and vertices are clearly marked with small dots.



Label words: Vertex · Parallel lines · Perpendicular lines · Right-angled triangle · Hexagonal prism · Acute angle · Obtuse angle

Steps:

1. Step 1: Draw a large hexagon for the base of the flowerbed. Label two of the parallel lines with arrows.
2. Step 2: Draw a 3D hexagonal prism representing the shed. How many faces, edges, and vertices does this shape have?
3. Step 3: Draw a right-angled triangle next to the shed to represent a decorative garden ornament. Mark the right angle with a square symbol.

4. Step 4: Label one obtuse angle and one acute angle within your drawing.
5. Step 5: If the shed costs £45.50 and the flowerbed costs £22.75, what is the total cost of Max's garden project?