

Max's Magnificent Geometry Guide

Get your brain buzzing with Max the Monkey—every shape is a puzzle waiting to be solved!

- A 2D shape is a polygon if it has straight sides and is a closed shape. Triangles, quadrilaterals, and pentagons are all polygons.
- A 3D shape's 'net' is a 2D pattern that can be folded to make the solid shape. Always check that the number of faces on the net matches the 3D shape.
- Angles are measured in degrees ($^{\circ}$). A full turn is 360° , a half turn is 180° , and a right angle is exactly 90° .
- Parallel lines are always the same distance apart and will never meet, no matter how far you extend them.
- Perpendicular lines meet at a perfect right angle (90°), just like the corner of a square or a set of grid axes.
- To calculate the volume of a cuboid, use the formula: $\text{Length} \times \text{Width} \times \text{Height}$. The answer is always in units cubed (cm^3).

Did you know? Did you know that a honeycomb is one of nature's best examples of geometry? Bea the honeybee builds her hive using hexagons because they fit together perfectly with no gaps, using the least amount of wax to create the strongest structure!

Key vocabulary: Vertices · Edges · Faces · Net · Parallel · Perpendicular · Polygon · Reflex angle