

Max's Mathematical Map of Space: Area and Perimeter

Master the boundaries and fill the space—let's solve the puzzle!

■ **Perimeter** is the total distance around the outside of a 2D shape. You calculate it by adding the lengths of all the sides together.

■ **Area** is the amount of surface a shape covers. For rectangles, we use the formula: $\text{Area} = \text{length} \times \text{width}$, measured in square units like cm^2 or m^2 .

■ **Rectilinear shapes** are polygons where all angles are right angles. To find the perimeter of a complex rectilinear shape, ensure every single side length is accounted for.

■ When calculating the area of a composite shape, you can split it into smaller rectangles, find the area of each, and add them together.

■ If a rectangle has a length of 8m and a width of 5m, the perimeter is 26m ($8+5+8+5$), while the area is 40m^2 (8×5).

Did you know? Did you know? If you laid out the perimeter of a standard football pitch, it would be roughly 340 metres long, but the area inside covers over 7,000 square metres! That is enough space for Max the monkey to practise his gymnastics thousands of times over.

Key vocabulary: Perimeter · Area · Rectilinear · Composite · Dimension · Square units · Formula