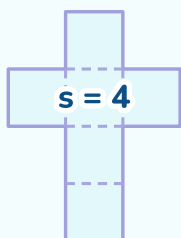
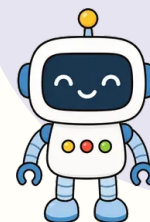


# Surface area formulas



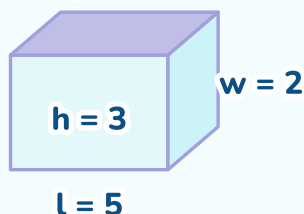
6 equal faces

**Cube**

$$6 \times s \times s$$

$$6 \times 16 = 96$$

3 faces, doubled

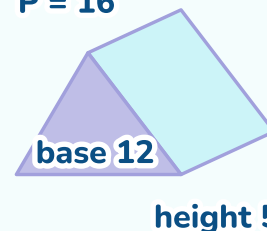


**Box**

$$2(lw + lh + wh)$$

$$2(10 + 15 + 6) = 62$$

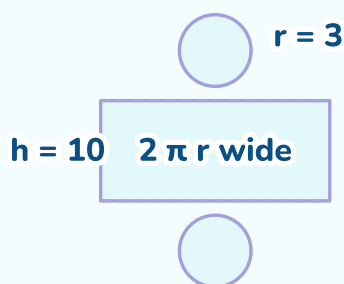
P = 16



**Prism**

$$2 \times \text{base} + P \times \text{height}$$

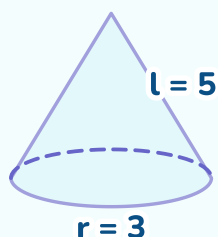
$$2(12) + 16 \times 5 = 104$$



**Cylinder**

$$2\pi r^2 + 2\pi r h$$

$$56 + 188 = 244$$



**Cone**

$$\pi r^2 + \pi r l$$

$$28 + 47 = 75$$



**Sphere**

$$4 \times \pi \times r \times r$$

$$4 \times 3.14 \times 25 = 314$$

Surface area is the **wrapping** — every face added up, so it stays in sq cm even though the shape is solid. Unfold the solid in your head and add the flat pieces.