

What should I already know?

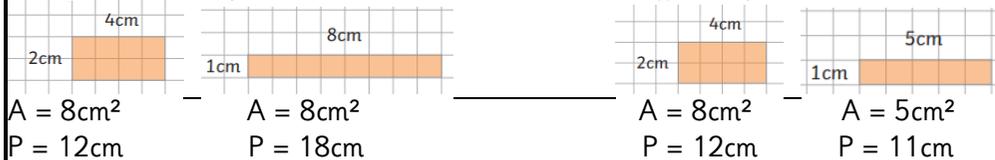
- Know the definition of perimeter, area and volume.
- Calculate the perimeter of and find missing sides of rectilinear shapes in centimetres and metres.
- Use width x length to find the area of rectilinear shapes.
- Estimate the volume of objects (using cubes) and capacity (using water).

Key Vocabulary and definitions

perimeter	The edge, or boundary, of an area or shape.
regular shape	2D shapes with closed sides, where all sides are the same length and all the interior angles are equal.
irregular shape	2D shapes with closed sides, where the sides and angles are not equal.
area	The amount of space inside a shape. width x length = area of a rectangle
rectilinear shape	A 2D shape with straight sides and right angles.
composite	Made up of several different parts.
volume	The amount of space that a substance or object occupies or that is enclosed within a container.
capacity	The maximum amount that something can hold.

Key Knowledge

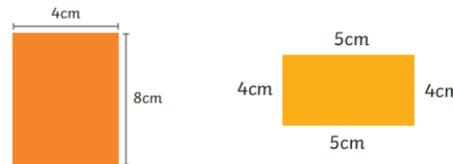
Recognise that shapes with the same areas can have different perimeters and vice versa.



Recognise when it is possible to use formulae for area and volume of shapes.

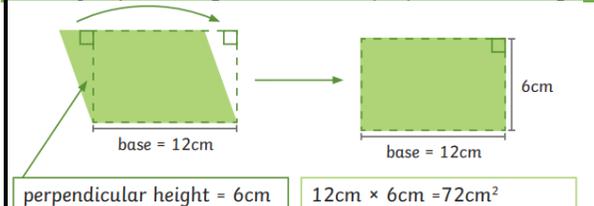
length x width = area of a rectangle

perimeter = length + width + length + width
= (length + width) x 2

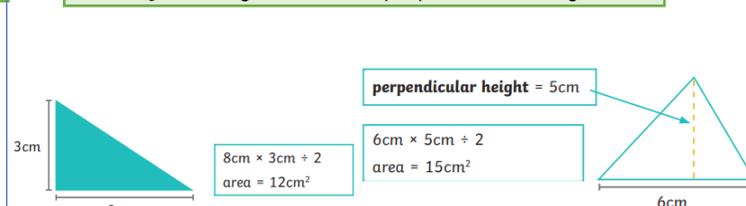


Calculate the area of parallelograms and triangles.

Area of a parallelogram = base x perpendicular height

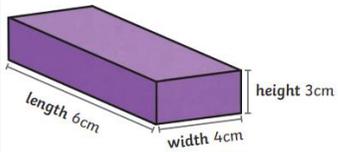


Area of a triangle = (base x perpendicular height) ÷ 2

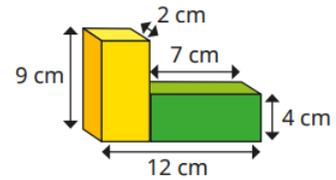
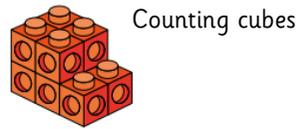


Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units [for example, mm^3 and km^3].

length \times width \times height = volume of a cuboid



Multiply dimensions in **any** order:
 $3\text{ cm} \times 6\text{ cm} \times 4\text{ cm}$
volume = 72 cm^3



Compound shapes.

