



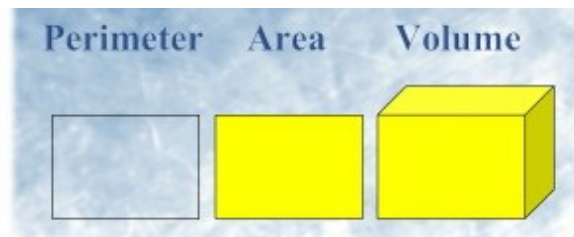
Topic: Perimeter, Area and Volume



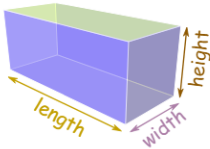
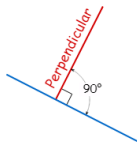
Year: 6

Strand: Shape and Measure

## What should I already know?

- The meaning of perimeter, area and volume.
- The area of a rectangle is given by the formula:  
**area = length × width**
- Area can be measured using square centimetres or square metres, and the abbreviations  $\text{cm}^2$  and  $\text{m}^2$
- Know that volume is measured in cubic units



Key Vocabulary	
perimeter	The distance around a 2D shape.
area	A measure of the size of a plane surface.
volume	A measure of three-dimensional space. Usually measured in cubic units
parallelogram	A quadrilateral whose opposite sides are parallel and consequently equal in length. 
rectilinear	A shape that has straight sides and right angles.
polygon	A 2D shape with straight sides.
cube	A 3D shape which has 6 square faces. 
cuboid	A 3D shape which has 6 rectangular faces. 
formula/ formulae	a group of letters, numbers, or other symbols which represents a scientific or mathematical rule.
perpendicular	At a right angle to. 
base	The lowest edge or part of something.

## What will I know by the end of the unit?

What do we need to know in order to work out the area of a shape?	The length and width.
How do you find the perimeter of a shape?	Add the lengths of the shape's sides.
How do you find the area of a triangle?	Multiply the base by the perpendicular height and then divide by 2.
What is the formula for finding the area of a triangle?	base × height ÷ 2
What formula can you use to work out the area of a parallelogram?	base × perpendicular height
How do you find the volume of a cuboid?	Multiply the length by the width and then by the height.
What is the formula for finding the volume of a cuboid?	Length x Width x Height

## Objectives

- Find and draw rectilinear shapes that have the same area
- Calculate area and perimeter of rectilinear shapes
- Approximate and estimate to work out the area of different triangles
- Calculate the area of a triangle
- Find the area of a parallelogram
- Find the volume of 3D shapes
- Calculate the volume of cuboids

## Useful Websites

<https://www.bbc.co.uk/bitesize/articles/zjsm8hv>