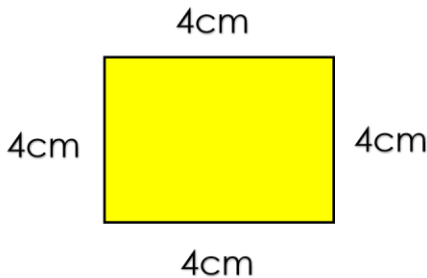


Perimeter, Area and Volume

Calculating perimeter:

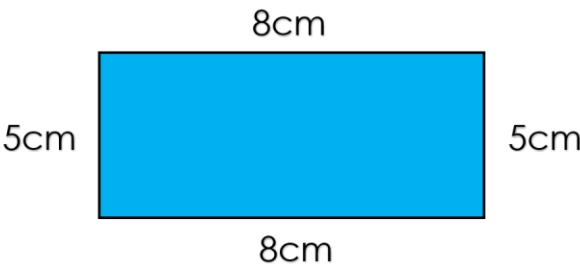
The perimeter of a shape can be calculated by adding up the lengths of each side.

e.g.



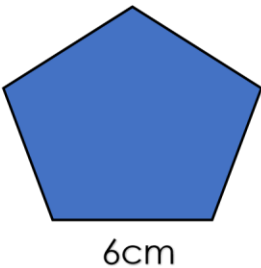
$$4\text{cm} + 4\text{cm} + 4\text{cm} + 4\text{cm} = 16\text{cm}$$

$$\text{Perimeter} = 16\text{cm}$$



$$8\text{cm} + 8\text{cm} + 5\text{cm} + 5\text{cm} = 26\text{cm}$$

$$\text{Perimeter} = 26\text{cm}$$

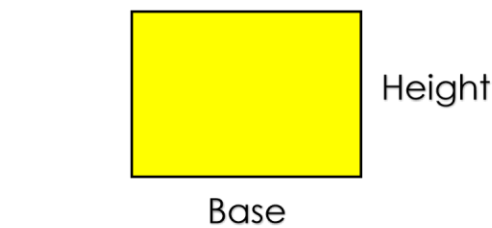


$$6\text{cm} + 6\text{cm} + 6\text{cm} + 6\text{cm} + 6\text{cm} = 30\text{cm}$$

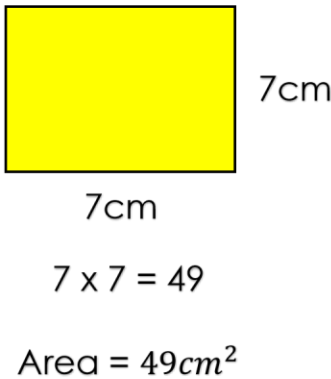
$$\text{Perimeter} = 30\text{cm}$$

Calculating area of squares and rectangles:

To calculate the area of squares and rectangles, you need to calculate base x height/ width x length.

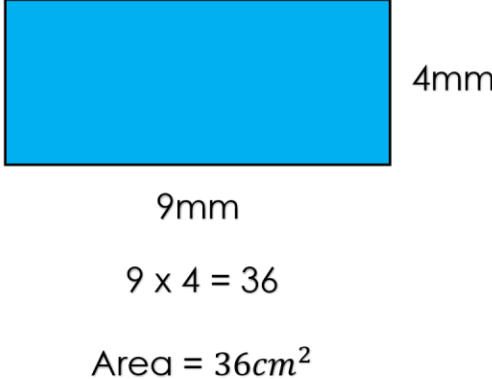
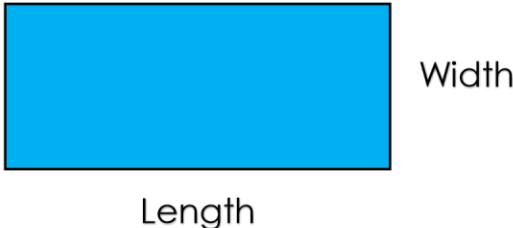


e.g.



$$7 \times 7 = 49$$

$$\text{Area} = 49\text{cm}^2$$



$$9 \times 4 = 36$$

$$\text{Area} = 36\text{cm}^2$$



Key Vocabulary



Area – The extent or measurement of a surface

Composite/ compound shape - A shape made up from other shapes e.g. a rectangle and a square

Cube – A three-dimensional shape, contained by six equal square faces

Cuboid - A three-dimensional shape which has six rectangular faces

Perimeter – The continuous line forming the boundary of a closed geometrical figure

Rectilinear – A shape where all sides meet at right angles

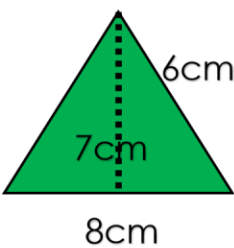
Shape – A geometric figure such as a square, triangle or rectangle

Volume – The amount of space that a substance or object occupies, or that is enclosed within a container

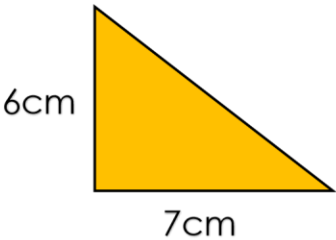
Calculating area of triangles:

To calculate the area of triangles, you need to do base x height and divide the answer by 2.

e.g.



$$8 \times 7 = 56$$
$$56 \div 2 = 28$$
$$\text{Area} = 28\text{cm}^2$$

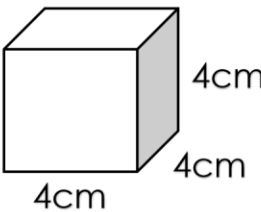


$$6 \times 7 = 42$$
$$42 \div 2 = 21$$
$$\text{Area} = 21\text{cm}^2$$

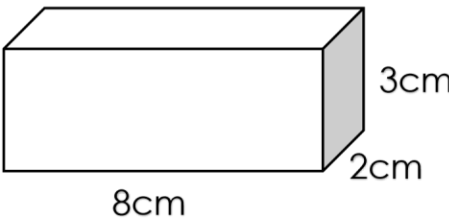
Calculating the volume of cubes and cuboids:

To calculate the volume of a cube or cuboid, you need to do length x width x height.

e.g.



$$4 \times 4 \times 4 = 64$$
$$\text{Volume} = 64\text{cm}^3$$



$$8 \times 2 \times 3 = 48$$
$$\text{Volume} = 48\text{cm}^3$$