LIONHEART EDUCATIONAL TRUST

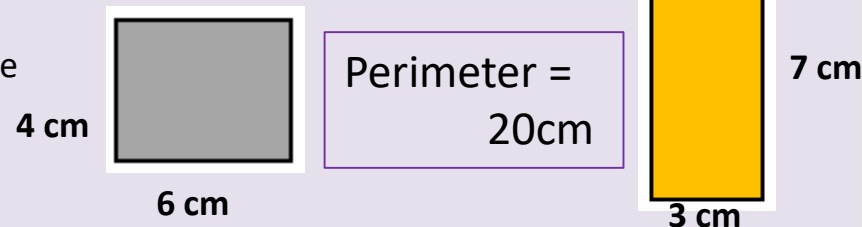## Area and Perimeter of Rectangles

4cm

8cm
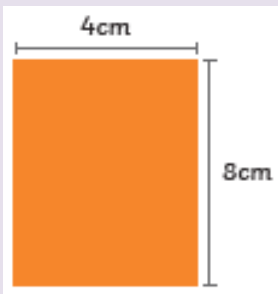
**Perimeter =
2 x (length + width)**
P = 2 x (L + W)
P = 2 x (8 + 4) = 24cm

Area = length x width
A = L x W
A = 8 x 4 = 32cm²

Shapes with the areas can have different perimeters

9 cm

2 cm

6 cm

3 cm

Area= 18cm²
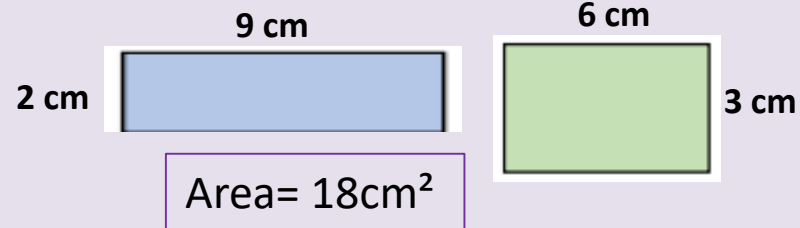
Shapes with the same perimeter can have different areas

4 cm

6 cm

Perimeter = 20cm

7 cm

3 cm

Area of Triangles

3cm

8cm

Perpendicular height

6cm
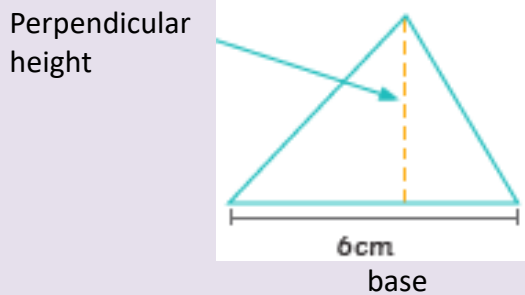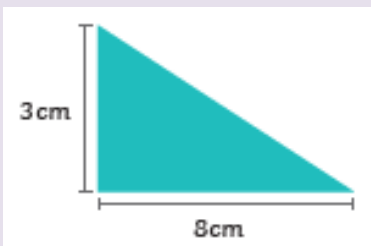
base

Area = base x perpendicular height ÷ 2
A = (b x h) ÷ 2
A = (8 x 3) ÷ 2 = 12cm²

Area of Parallelograms

base = 12cm

base = 12cm

6cm

Perpendicular height
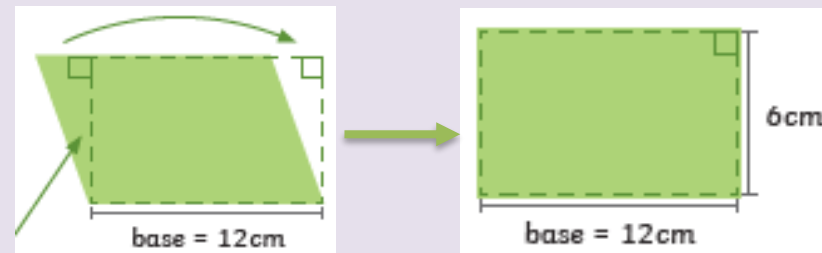
Area = base x perpendicular height
A = (b x h)
A = 12 x 6 = 72cm²

Volume of Cuboids

length

7cm

width

3cm

height

2cm
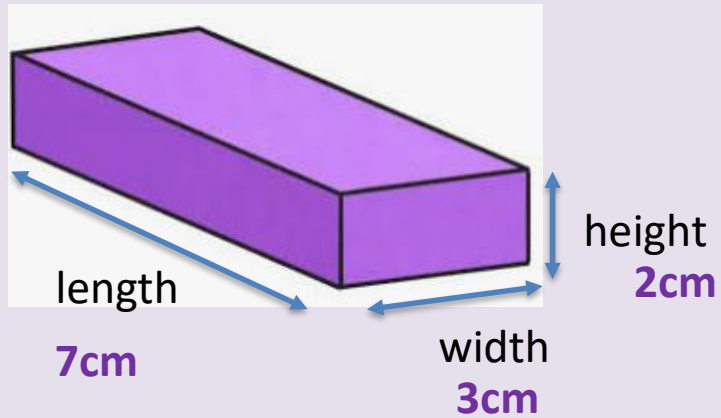
Volume = length x width x height

V = L x W x H

V = 7 x 3 x 2 = 42cm³

Volume is recorded

as cubed - cm³
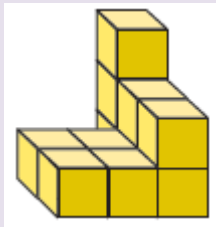
1cm³

11 cm³

Vocabulary

perimeter	The distance around a 2D shape
area	The amount of space inside a 2D shape
volume	The amount of 3D solid space that is taken up
capacity	The amount of liquid that a container can hold
cubic unit	Used when measuring volume or capacity eg cm³ m³
perpendicular height	The height of a shape measured at a right angle from the base
formula	A rule written with mathematical symbols

The formula for the area of a rectangle is
A = L x W

A – area
L – length
W - width |