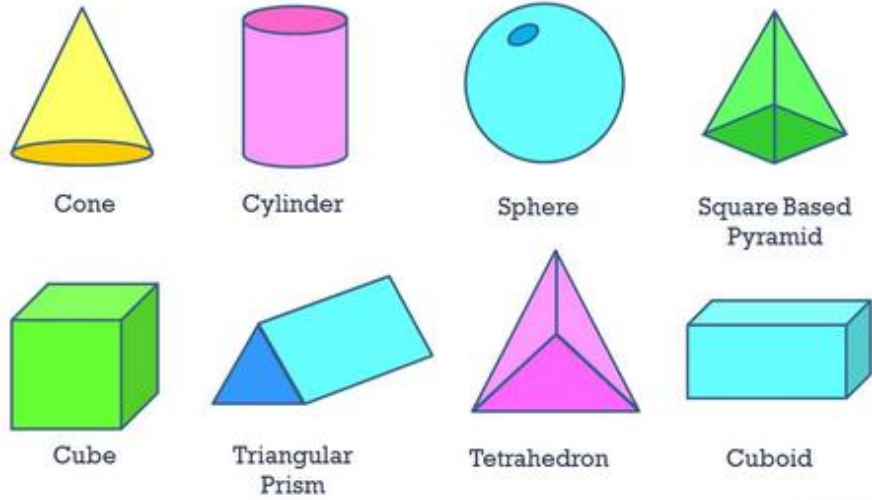
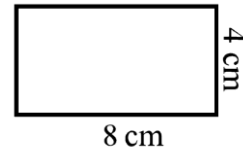


# 3D shapes



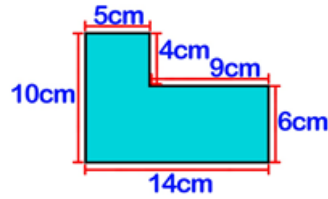
## Perimeters of Shapes

The perimeter is the distance around a shape.  
To calculate the perimeter, you add up lengths:



$$4\text{cm} + 4\text{cm} + 8\text{cm} + 8\text{cm} = 24\text{cm}$$

## Perimeter of a compound shape



## Area of Shapes (eg. cm<sup>2</sup>, mm<sup>2</sup>)

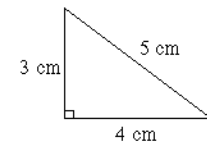
To calculate the area of a parallelogram, rectangle or square:

Length x Width



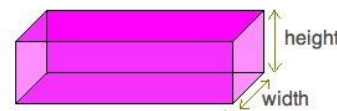
To calculate the area of triangle (eg. cm<sup>2</sup>, mm<sup>2</sup>):

$$(\text{Base} \times \text{Height}) \div 2$$

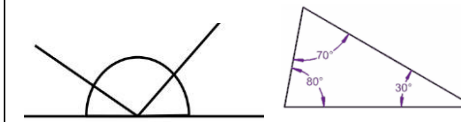


Volume: (Remember cm<sup>3</sup>)

Length x Width x Height



## Angle Sums



Straight Line and a triangle = 180°

## Regular/ Irregular

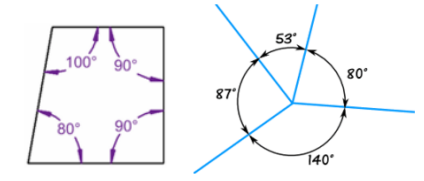
In regular shapes, all of the angles are the same and all the sides are the same length.

In irregular shapes, the angles or sides are different.



## Angle Sums

Quadrilaterals and about a point = 360°



## Circles

Radius, Diameter and Circumference



The diameter is double the radius.  
The circumference is the distance around the circle.

## Types of Quadrilateral

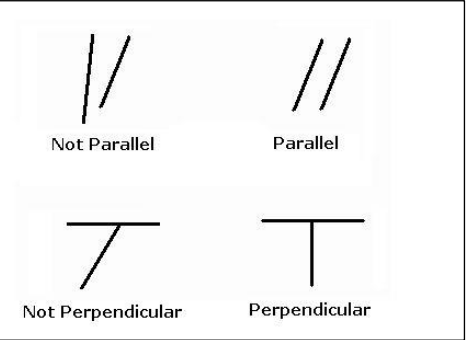
square	rhombus	kite
4 right angles	0 right angles	0 right angles
4 equal sides	4 equal sides	2 sets of equal sides
Opposite sides are parallel	Opposite sides are parallel	No sides are parallel
All sides the same length	All sides the same length	2 pairs of sides the same length
rectangle	parallelogram	trapezium
4 right angles	0 right angles	0 right angles
4 equal sides	2 sets of equal sides	2 sets of equal sides
Opposite sides are parallel	Opposite sides are parallel	1 set of sides are parallel
Opposite sides the same length	Opposite sides the same length	sides can be any length

# Maths Mat: Year 6

## Parallel and Perpendicular

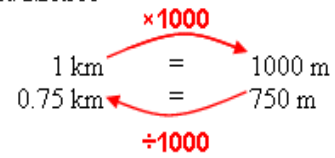
-Parallel lines or sides stay the same distance apart.

-Perpendicular lines or sides meet at right angles.

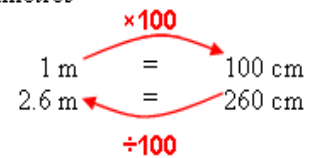


## Units of Length

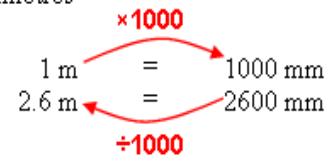
Kilometres and Metres



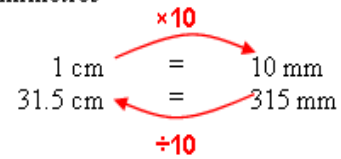
Metres and Centimetres



Metres and Millimetres

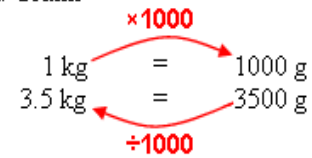


Centimetres and Millimetres

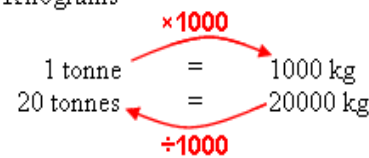


## Units of Mass

Kilograms and Grams

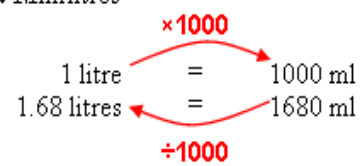


Tonnes and Kilograms



## Units of Capacity

Litres and Millilitres



## Roman Numerals

Symbol	Value
I	1
V	5
X	10
L	50
C	100
D	500
M	1000

## Prime Numbers

A number that is only divisible by itself and 1.  
**2, 3, 5, 7 (not 9) 11**

## Factors:

Factors divide into a number exactly.

Eg. The factors of 6 are: 1, 6, 2 and 3

## Multiples

Think Times tables.  
Multiples of 3 are: 6, 9, 12, 15 etc.

## Squared Numbers

$$5^2 = 5 \times 5 = 25$$

## Cubed Numbers:

$$5^3 = 5 \times 5 \times 5 = 125$$

## Averages

**Hey Diddle, Diddle,**

**The median's the Middle,**

**You Add and Divide for the Mean,**

**The Mode is the one that Appears the Most,**

**And the Range is the Difference Between**

## Days in a Month

30 days have September, April, June and November,  
All the rest have 31,  
Except February alone,  
It has 28 days clear,  
And 29 in each leap year.

**Remember, in a year, there are: 52 weeks, 12 months or 365 days.**

## Types of Angles

