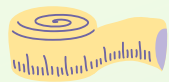
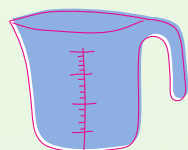
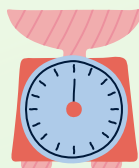


Measurement



Length is measured in metres 100 centimetres (cm) = 1 metre (m)
 10 millimetres (mm) = 1 centimetre (cm)
 1000 millimetres (mm) = 1 metre (m)
 1000 metres (m) = 1 kilometre (km)

Mass is measured in grams
 1000 grams (g) = 1 kilogram (kg)



Volume is measured in litres
 1000 millilitres (ml) = 1 litre (l)
 100 centilitres (cl) = 1 litre (l)
 1 centilitre (cl) = 10 millilitres (ml)

× Multiplying and dividing by 10, 100 and 1000 ÷

To multiply by 10, move each digit 1 place to the left
 To multiply by 100, move each digit 2 places to the left
 To multiply by 1000, move each digit 3 places to the left
 To divide by 10, move each digit 1 place to the right
 To divide by 100, move each digit 2 places to the right
 To divide by 1000, move each digit 3 places to the right

Remember to add any place holder zeros and that the decimal point never moves!

Order of operations

Brackets **I**ndices **D**ivide **M**ultiply **A**dd **S**ubtract

() \times^2 \div \times $+$ $-$

Follow BIDMAS when completing calculations

Time



60 seconds = 1 minute
 60 minutes = 1 hour
 24 hours = 1 day
 7 days = 1 week
 12 months = 1 year
 There are 365 days in a year and 366 in a leap year

30 days hath September
 April, June and November
 All the rest have 31
 Except February clear
 Which has 28 and 29 in a leap year

Prime, square and cube numbers

A **prime** number only has 1 and itself as factors. The first 10 prime numbers are 2, 3, 5, 7, 11, 13, 17, 19, 23, 29

A **square** number is the product of a number multiplied by itself
 For example:
 $2^2 = 2 \times 2 = 4$
 $4^2 = 4 \times 4 = 16$

A **cube** number is the product when a number is multiplied by itself three times
 For example:
 $3^3 = 3 \times 3 \times 3 = 27$
 $5^3 = 5 \times 5 \times 5 = 125$



Year 6 Maths Facts



Fractions, decimals and percentages

a half = $0.5 = 1/2 = 50\%$
 a quarter = $0.25 = 1/4 = 25\%$
 three quarters = $0.75 = 3/4 = 75\%$
 one fifth = $0.2 = 1/5 = 20\%$
 one tenth = $0.1 = 1/10 = 10\%$
 one hundredth = $0.01 = 1/100 = 1\%$



To find a percentage:
 50% divide by 2
 25% divide by 4
 10% divide by 10
 1% divide by 100

To find a fraction of an amount, divide by the denominator and multiply by the numerator

To add or subtract fractions with different denominators, find equivalent fractions using the lowest common multiple of both denominators

$$\begin{aligned} 1/5 + 2/3 \\ = 3/15 + 10/15 \\ = 13/15 \end{aligned}$$

To multiply fractions, multiply the numerators, then the denominators

$$1/2 \times 1/4 = 1/8$$

To divide a fraction by an integer, multiply the fraction's denominator by the integer.

$$1/2 \div 2 = 1/4$$

Divisibility rules

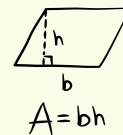
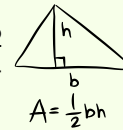
2x table - an even number
 3x table - the digital root (sum of digits) is 3, 6 or 9
 4x table - you have a whole number when you halve and halve again
 5x table - ends in a 0 or 5
 6x table - even, with a digital root of 3, 6 or 9
 8x table - you have a whole number when you halve three times
 9x - digital root is 9
 10x - ends in a 0

Perimeter, area and volume

Perimeter is the distance all the way around the outside of an object.

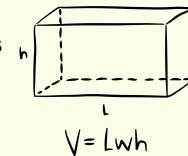
The **area** of a rectangle is width x length

The **area** of a triangle is $1/2$ base x perpendicular height



The **area** of a parallelogram is base x perpendicular height

The **volume** of a cuboid is length x width x height



Finding the mean

Hey diddle, diddle
 The median's the middle

You add and divide for the mean

The mode is the one you see the most
 And the range is the difference between.

Shapes



Equilateral triangle

Regular shape
 3 equal sides, 3 equal angles
 3 lines of symmetry

Isosceles triangle

2 equal sides, 2 equal angles
 1 line of symmetry

Scalene triangle

All different sides and angles

Square

Regular quadrilateral
 4 equal sides, 4 equal angles
 4 lines of symmetry

Rectangle

4 right angles
 2 pairs of parallel lines

Rhombus

4 equal sides

Parallelogram

2 pairs of parallel lines

Trapezium

1 pair of parallel lines

Kite

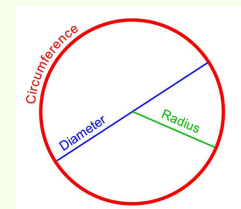
Two pairs of equal sides adjacent to one another

Circle

The **radius** is the centre to the edge.

The **diameter** is straight across and through the middle.

The **circumference** is the distance around the outside of the circle.



Angles

The angles in a triangle add up to 180° .
 The angles in a quadrilateral and around a point add up to 360° .