Essential Maths Facts for Year 6

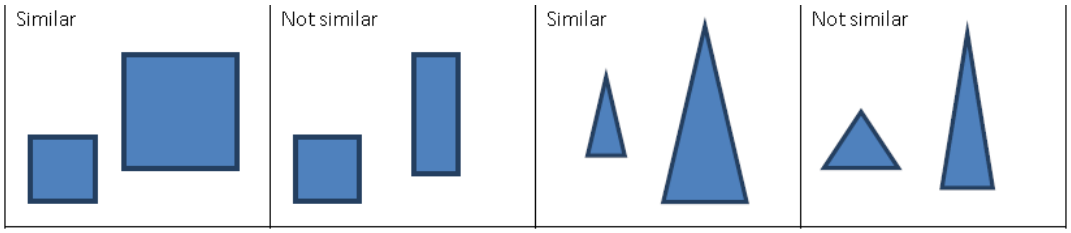
At our school, by the end of Year 6 you need to know:

Number

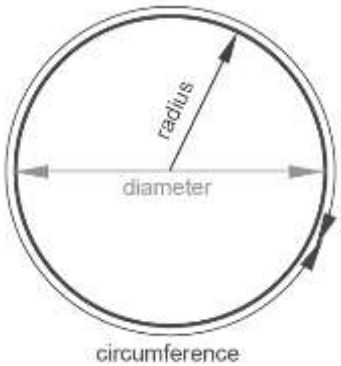
- ✓ P**rime numbers** have exactly 2 factors, one of which is 1 and one of which is itself.
- ✓ 1 is not a prime number, as it only has one factor: 1.
- ✓ 2 is the only even prime number.
- ✓ The first ten prime numbers are: 2, 3, 5, 7, 11, 13, 17, 19, 23, 29
- ✓ Numbers which are not prime numbers are called composite numbers.
- ✓ Cube numbers are numbers created by multiplying the same three numbers together.
- ✓ Cubing: $2^3 = 2 \times 2 \times 2$
- ✓ The first five cube numbers are: 1, 8, 27, 64, 125
- ✓ 'Of' means multiply e.g. 25% of 520 is the same as 25% x 520.

Shape

- ✓ Similar or **congruent** shapes are the same shape, but a different size.

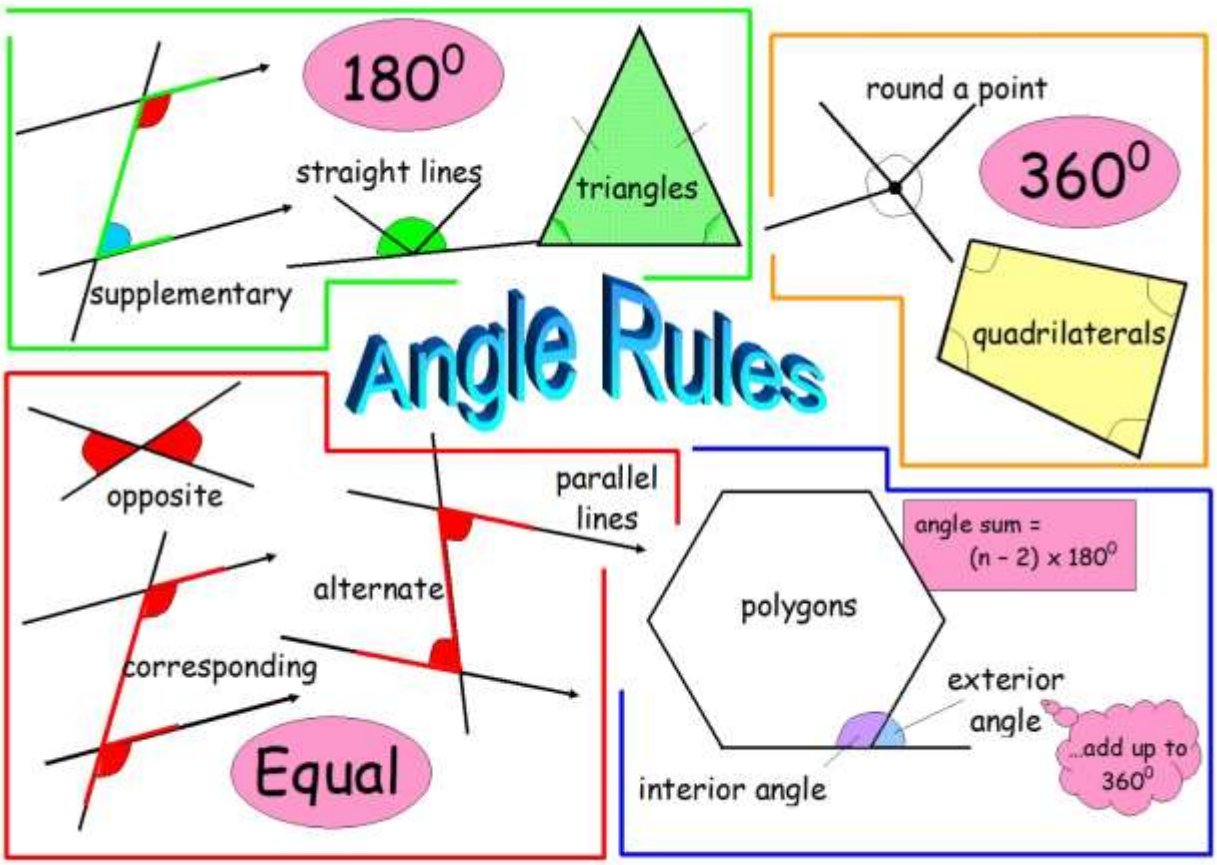


- ✓ A **circle** contains a radius, circumference and a diameter.
- ✓ The circumference is the perimeter of a circle.
- ✓ The diameter passes from edge to edge, through the centre of the circle.
- ✓ The radius is from the centre of the circle to the perimeter of the circle.
- ✓ The radius is half of the diameter.
- ✓ Volume of a cuboid = length x breadth x height
- ✓ Area of a parallelogram = base x height.



✓ Area of a triangle = $\frac{base\ x\ height}{2}$

Angle



Measures

- ✓ 1 mile ≅1.6km
- ✓ 1km ≅ 0.6 miles
- ✓ 1 foot ≅ 30cm

- ✓ 1 gallon ≅ 4.5l
- ✓ 1l ≅ 1.75 pints

Statistics

✓ In a pie chart, these percentages are equivalent to:

10% = 36°	33% = 120° (roughly)
25% = 90°	50% = 180°
75% = 270°	66% = 240° (roughly)
20% = 72°	