

Maths Knowledge Organiser

Geometry: shapes

2D shape: shapes which are flat, having only two dimensions- height/ length and width.

3D shape: shapes which have a solid form: having 3 dimensions - height/ length and depth.

face: any flat surface of a 3D shape. Faces can be flat or curved and of many different shapes.

edge: the place on a 3D shape where two faces meet.

vertex: also known as corners. The place on a 3D shape where three faces meet. Also used to describe the corners of a 2D shape.

Recognise and Describe 2D Shapes

square

triangle rectangle
circle pentagon
hexagon quadrilateral

Recognise and Describe 3D Shapes

cube

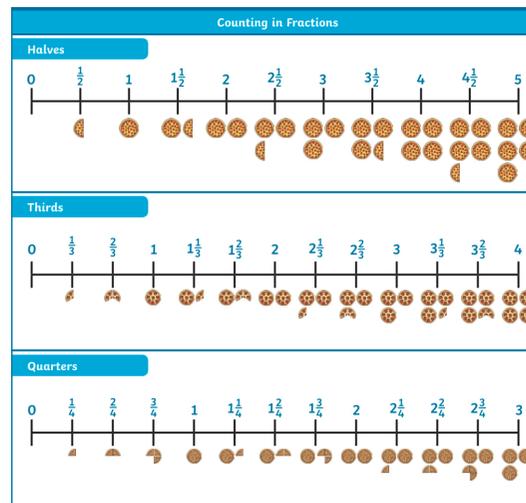
apex or vertex
cuboid
cone
curved surface
sphere
cylinder
triangular prism
square-based pyramid

fraction: a number that represents part of a whole, e.g. $\frac{1}{2}$

numerator: the number above the line. It shows how many parts we have

denominator: the number below the line. It shows how many equal parts the number or item has been divided into.

equivalent fractions: fractions that represent the same amount but are expressed using different numbers, e.g. $\frac{1}{2}$ and $\frac{2}{4}$



Fractions

Half

A whole split into two equal parts.

$\frac{1}{2}$

$\frac{1}{2}$ of 8 = 4

Quarter

A whole split into four equal parts.

$\frac{1}{4}$

$\frac{1}{4}$ of 12 = 3

Third

A whole split into three equal parts.

$\frac{1}{3}$

$\frac{1}{3}$ of 6 = 2

Non-unit Fractions

$\frac{2}{3}$

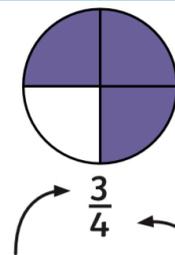
$\frac{3}{4}$

Equivalent Fractions

$$\frac{1}{2} = \frac{2}{4}$$



Numerator and Denominator



Numerator
How many equal parts of the whole are needed?

Denominator
How many equal parts are in the whole?