



Maths Newsletter

This term our whole school targets are:

Fractions and Shape

Year 1

- I can recognise, find and name a half
- I can recognise, find and name a quarter
- I can recognise and name 2D shapes including recognising that a square is also a rectangle
- I can identify and describe the properties of 2D shapes including the number of sides and line symmetry
- I can recognise and name 3D shapes including recognising that a cube is also a cuboid
- I can compare and sort 2D and 3D shapes and everyday objects

Year 3

- I can count up and down in tenths
- I can recognise that tenths arise from dividing an object into 10 equal parts
- I can divide one-digit numbers by 10
- I can divide quantities by 10
- I can recognise, find and write fractions of a set of objects
- I can recognise and use fractions as numbers
- I can recognise and show equivalent fractions with small denominators
- I can add and subtract fractions with the same denominator within one whole $5/7 + 1/7 = 6/7$
- I can compare and order unit fractions, and fractions with the same denominators
- I can solve problems that involve fractions
- I can draw 2D shapes and make 3D shapes
- I can recognise 3D shapes in different orientations and describe them
- I can recognise angles as a property of shape or a description of a turn
- I can identify right angles, recognise that two right angles make a $\frac{1}{2}$ turn, three make $\frac{3}{4}$ of a turn and four a complete
- I can identify whether angles are greater than or less than a right angle turn
- I can identify horizontal and vertical lines and pairs of perpendicular and parallel lines

Year 5

- I can compare and order fractions whose denominators are all multiples of the same number
- I can identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths
- I can recognise mixed numbers and improper fractions and convert from one form to the other
- I can add and subtract fractions with the same denominator and denominators that are multiples of the same number
- I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
- I can read and write decimal numbers as fractions
- I can recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
- I can identify 3D shapes from 2D representations
- I can estimate and compare acute, obtuse and reflex angles
- I can draw given angles and measure them
- I can identify angles in multiples of 90 degrees
- I can use the properties of rectangles to deduce related facts and find missing lengths and angles
- I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles

Year 2

- I can recognise and write fractions $1/3$, $\frac{1}{4}$, $2/4$ and $3/4$ of a length, shape, set of objects or quantity
- I can write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $2/4$ and $\frac{1}{2}$
- I can identify and describe the properties of 2D shapes including the number of sides and line symmetry in a vertical line
- I can identify and describe the properties of 3D shapes including the number of edges, vertices and faces
- I can identify 2D shapes on the surface of 3D shapes e.g. circles on a cylinder
- I can compare and sort 2D and 3D shapes and everyday objects

Year 4

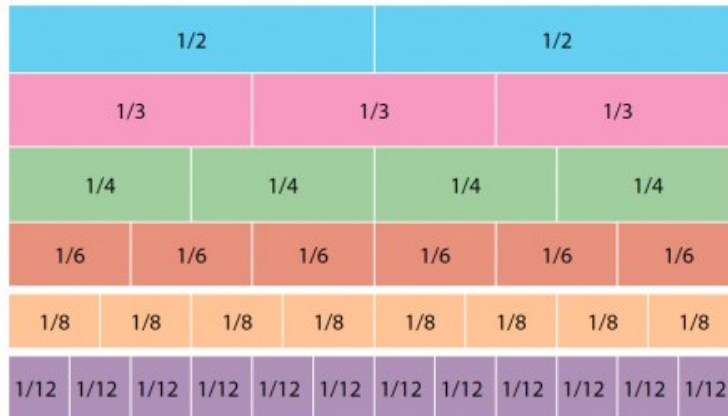
- I can recognise and show, using diagrams, families of common equivalent fractions
- I can count up and down in hundredths; recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10
- I can solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities
- I can add and subtract fractions with the same denominator
- I can recognise and write decimal equivalents of any number of tenths or hundredths
- I can recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$
- I can find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths
- I can solve simple measure and money problems involving fractions and decimals to 2 decimal places
- I can compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes
- I can identify acute and obtuse angles and compare and order angles up to two right angles by size
- I can identify lines of symmetry in 2D shapes
- I can complete a simple symmetric figure with respect to a specific line of symmetry

Year 6

- I can use common factors to simplify fractions; use common multiples to express fractions in the same denomination
- I can compare and order fractions, including fractions >1
- I can add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
- I can multiply simple pairs of proper fractions, writing the answer in its simplest form e.g. $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$
- I can divide proper fractions by whole numbers e.g. $1/3 \div 2 = 1/6$
- I can associate a fraction with division and calculate decimal fraction equivalents e.g. 0.375 for a simple fraction e.g. $\frac{3}{8}$.
- I can draw 2D shapes using given dimensions and angles
- I can recognise, describe and build simple 3D shapes including making nets
- I can compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals and regular polygons
- I can illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
- I can recognise angles where they meet at a point, are on a straight line or are vertically opposite and find missing angles

Ways to help your child

- To show halves and quarters use items around the home—cut an apple in half and then in half again to show quarters.
- Show equivalent fractions by using this fraction wall so children can see the different fractions:



- Play snap or matching pairs: $1/2 = 0.5 = 50\%$ etc.
- Find different 2D or 3D shapes around your home. Ask your child to describe their properties: number of sides, corners, right angles, faces.
- Open up cereal boxes to show the net of a cuboid.
- Draw your own net and construct a 3D shape.

Useful websites for parents:

<http://nrich.maths.org/2550>

<http://www.theschoolrun.com/teacher-tricks-fractions>

Useful websites for children:

<http://www.maths-games.org/fraction-games.html>

<http://www.topmarks.co.uk/maths-games/7-11-years/fractions-and-decimals>

<http://www.topmarks.co.uk/maths-games/5-7-years/shapes>

Maths fact.....

Did you know that:

$$111,111,111 \times 111,111,111 = 12,345,678,987,654,321.$$

RIDDLE OF THE TERM

Two fathers and two sons sat down to eat eggs for breakfast. They ate exactly three eggs, each person had an egg.

The riddle is for you to explain how.

Good luck!