Y5 Maths — What they need to know...

This term we will be focusing on **fractions**. Here are the key objectives that we will be covering:

- To compare and order fractions whose denominators are all multiples of the same number.
- To identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.
- To read and write decimal numbers as fractions (for example, 0.71 = 71/100).
- To recognise mixed numbers (e.g. 2 and 3/7) and improper fractions 17/7) and convert from one form to the other; write mathematical statements > 1 as a mixed number: 2/5 + 4/5 = 6/5 =11/5.
- To add and subtract fractions with the same denominator and multiples of the same number.
- To multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
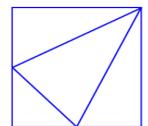
Activities & Games:

★ **Smarties fractions -** Empty out a tube of Smarties and count how many smarties you have. This is your whole; when writing fractions, this will be the number on the bottom which is called the denominator. Now write what fraction you have of each colour. Can you write the same fraction but in a different way? e.g. 7/35 (or 1/5) of my smarties are blue.

★ Use the lines on this figure to show how the pattern of triangles can be used to divide the square into two halves, three thirds, six sixths and nine ninths. More lines are needed to divide it into four quarters. How many ways can you divide it into halves using just the lines given?
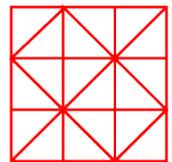
★★★ The first picture here was made by drawing a line from the top right corner of a square to the midpoint of each of the opposite sides. The two midpoints were then joined with another line to create four triangles. What fraction of the square is each of the triangles?
Can you work out how the second shape was created? What shape has been made in the middle? What fraction of the square is this shape?
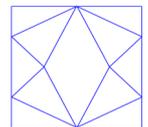
★★ The perimeter of the rectangle is 1 & 7/9. Work out the missing length.

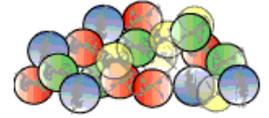$\frac{2}{3}$

?
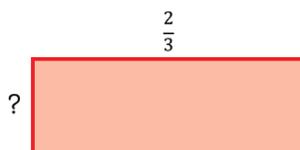
★★ Fill in the missing numbers:

$$4 \frac{5}{6} + \boxed{\phantom{\frac{0}{0}}} = 10 \frac{1}{3}$$

My Maths

Going deeper...

Andy and his friend Sam were walking along the road together. Andy had a big bag of marbles.

Unfortunately the bottom of the bag split and all the marbles spilled out. Poor Andy!

One third (⅓) of the marbles rolled down the slope too quickly for Andy to pick them up.

One sixth (⅙) of all the marbles disappeared into the rain-water drain.

Andy and Sam picked up all they could but half (½) of the marbles that remained nearby were picked up by other children who ran off with them.

Andy counted all the marbles he and Sam had rescued.

He gave one third (⅓) of these to Sam for helping him pick them up. Andy put his remaining marbles into his pocket. There were 14 of them.

How many marbles were there in Andy's bag before the bottom split?

What fraction of the total number that had been in the bag had he lost or given away?

Wonderful websites

Fractions

Converting fractions to decimals

Equivalent fractions

Whilst it can be very tempting to encourage your child to have a go at the more challenging activities, it is far better to work with them at a level they feel confident with. Significant and regular practise of even the most basic skills outlined in this document will lead to a much deeper understanding and greater proficiency, and ultimately a much more pleasant 'homework' experience for you and your child!