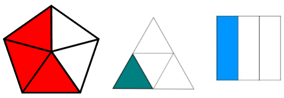
Y4 - Fractions

This term's focus is **fractions**. By the end of Year 4, children should be able to recognise and show, using diagrams, families of equivalent fractions. For example, 1/3 = 3/9 = 4/12 and so on. They should also be able to solve fraction problems for both **unit** (e.g. 1/5)and **non unit** (e.g. 3/5) **fractions**. For instance, can you find 1/3 or 2/3 of 180ml? They should know the terms **numerator** (part) and **denominator** (whole), and be able to add and subtract fractions with the same denominator.

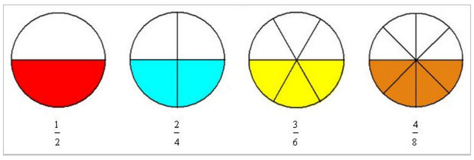
In class, the children will also be learning about decimals; they should be able to recognise and write decimal equivalents of any number of **tenths** and **hundredths**, such as 0.3 = 3/10 or 0.34 = 34/100. In addition to this, children should recognise and write decimal equivalents to 1/4; 1/2 and 3/4.

Activities & Games:



★★ Choose one of the following fractions (1/2, 1/3, 3/4, 2/5, 2/3, 4/6, 2/8) and then find a way to visually represent it. You could do this in lots of different ways: using a shape, by folding it and colouring it in; drawing a picture where, for instance, 2/5s of the ducks in the pond are white; or you could show collections of objects and take a photo of them.

★ Can you represent some equivalent fractions for 1/2, 1/3, 1/4, 2/3 and 5/6? What do you notice happens to the denominator and numerator? Can you find a rule for working out equivalent fractions?

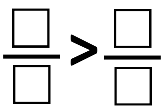


★ Make a matching pairs game for decimals and their equivalent fractions. For example, if I create a card with the fraction 1/2, then the matching card would be 0.5. Can you do the same for 1/4 and 3/4? Now try some other ones, such as 2/10 , 87/100 or even 235/1000. You could also try adding in some whole numbers, for example 5.25 = 5 1/4 . Make at least 8 matching pairs and then play with someone at home!

0.5

1/2

★★ This is a 2-player game. Each player needs to make a set of 1-6 digit cards, and place them face down on the table in a pile. They will also both need two blank fractions templates and an inequality sign like this:



Both players select the top four cards from their pile. If they are able to place these digits in to the empty spaces and create a statement that is true, they win a point.

★★★ Another game for 2 players. Each player takes it in turns to generate 3 digits, perhaps using a dice. Use the largest digit as the denominator and the other 2 digits as numerators, creating two fractions which they now need to add together. Convert any improper fractions into a mixed number. Whoever has the largest total wins a point.

My Maths

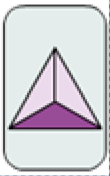
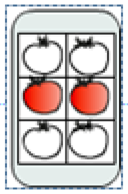
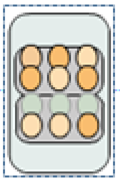
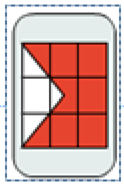
Use our school log in (Username: **coleridge1,** Password: **success74**), and then your own log in details to access activities related to our current topic on the MyMaths website. You can also have a look to see if there are some other fun games you would like to play. If you have misplaced your personal login, please see your class teacher to re-issue you one.

Going deeper...

Matching Fractions—with a difference!

Make a Matching Pairs Fraction game, but with a slight difference. The aim of the game is to turn over two cards which show equivalent fractions (fractions that equal the same amount). In it's simplest format, this might mean having the fraction 3/4 on one card and 9/12 on the other. However, as well as writing the fractions on your cards as digits, like this: 

find other, more interesting ways of representing them. Consider using:

Shapes:  **Arrays:**  **Pictures of objects:**  **Maybe add in some tricky ones like this:** 

Wonderful websites

[Fraction Matching Game]

[Numerators and Denominators]

[A selection of Fraction Games]

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!