Maths - Year 5

Numbers and the Number System 6: Comparing and ordering fractions

Key Vocabulary

Equivalence	The same value represented in different ways.
Proportion	Used to express a fraction of a whole e.g. ½ the grapes are green.
Proper fraction	A fraction where the numerator is smaller than the denominator.
Improper fraction	A fraction where the numerator is bigger than the de-nominator.
Mixed number	A number written as a whole number and a fraction e.g. 2½.
Factor	A number that divides into another number exactly.
Common factor	A whole number that divides into two or more other numbers exactly.
Scale up/ down	Increase or reducing an amount to make it larger or smaller in proportion.

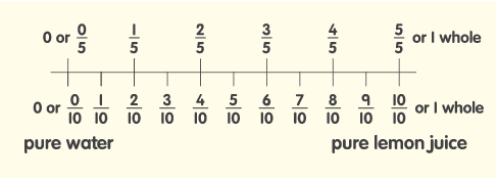
Mathematical Skills

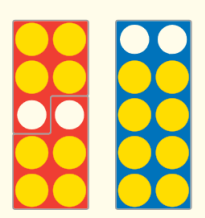
- Compare fractions whose denominators are multiples of the same number.
- Use knowledge of multiples to find equivalent fractions and illustrate this with structured apparatus.
- Compare fractions and order them using < and > symbols.
- Make connections between scaling up and multiplying, and scaling down and dividing, as inverses.
- Use knowledge of multiples and factors to simplify fractions to their lowest terms.

Mathematical Methods

- Comparing and ordering proper fractions whose denominators are multiples of the same number.

E.g. exploring the fraction of lemon juice and water when making lemonade.

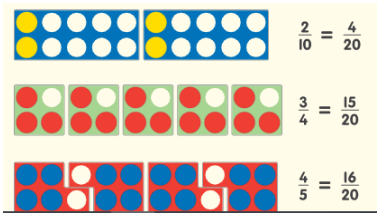




$\frac{4}{5}$ is equivalent to $\frac{8}{10}$

- Comparing and ordering proper fractions by finding a common denominator

e.g. tenths, quarters and fifths can all share/be converted to the common denominator /20.

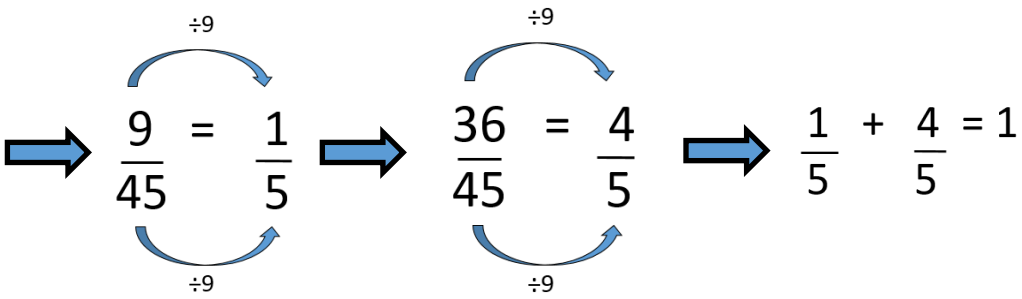


- Using greater than and less than signs to record comparisons of fractions e.g. finding the largest fraction by converting fractions to equivalent fractions.

$\frac{2}{6}$ or $\frac{5}{12}$ $\frac{2}{6}$ (x2) = $\frac{4}{12}$ (x2) Therefore $\frac{2}{6}$ is bigger.

- Simplifying fractions by finding common factors.

$9 + 36 = 45 = 1$
$45 \quad 45 \quad 45$



Can you..?

- Which fraction is bigger? Explain why. $\frac{2}{3}$ or $\frac{5}{6}$

- Put these fractions in size order, starting with the smallest.

$\frac{2}{3}$	$\frac{3}{8}$	$\frac{3}{4}$	$\frac{5}{9}$	$\frac{7}{12}$

- Complete the following $\frac{5}{8} > \frac{\square}{24}$

- Simplify $\frac{30}{36}$ to its lowest term.