Maths - Year 6

Number and the Number System 2: Fractions

Key Vocabulary

Proper fraction	A fraction where the numerator is smaller than the denominator.
Improper fraction	A fraction where the numerator is bigger than the denominator.
Mixed number	A number written as a whole number and a fraction e.g. 2½.
Proportion	Used to express a fraction of a whole e.g. ½ the grapes are green.
Numerator	Upper number of a fraction, shows how many of this kind of fraction.
Demoninator	Lower number of a fraction, gives the fraction its name.
Lowest common multiple (LCM)	The lowest quantity that is a multiple of a given quantity/ quantities e.g. 12 is the lowest common multiple of 2, 3 and 4.
Highest common factor (HCF)	The highest possible whole number that divides into two or more other numbers exactly.
Prime factor	A factor that is a prime number.
Simplest form	The smallest possible equivalent fraction.

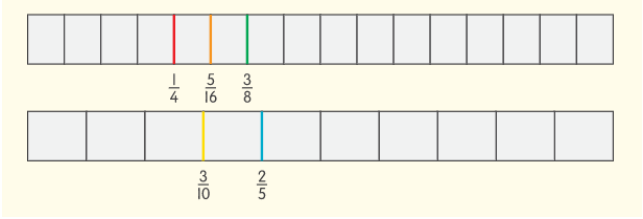
Mathematical Skills

- Recognise and generate equivalent fractions, and explain why they are equivalent.
- Notice and describe patterns within fraction families e.g. 1/4, 2/8, 3/12…
- Compare and order fractions and mixed numbers by expressing them in the same denomination, using a common multiple of the denominators.
- Simplify fractions using common factors.

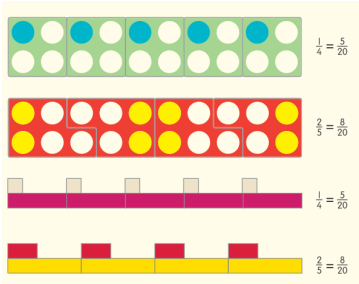
Mathematical Methods

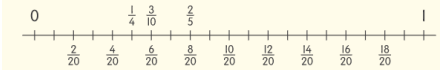
- Comparing and ordering fractions with different denominators.

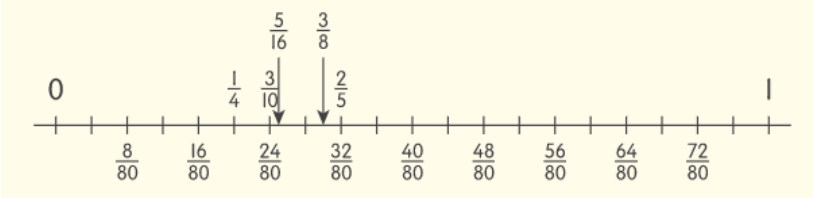
$$\frac{2}{5} > \frac{3}{8} > \frac{5}{16} > \frac{3}{10} > \frac{1}{4}.$$



- Comparing and ordering proper fractions by finding a common denominator.

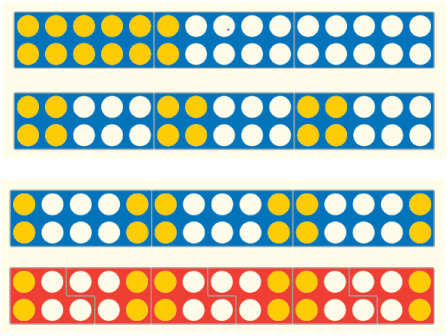






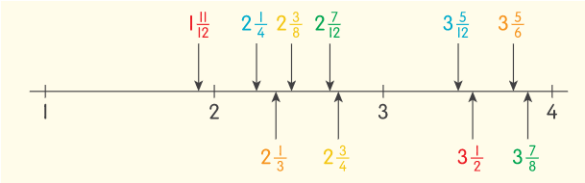
- Simplifying fractions e.g.

$$\frac{12}{30} = \frac{4}{10} = \frac{2}{5}$$



- Comparing and ordering mixed numbers.

Team	Representative	Number of lengths in 5 minutes
Blue	A	$2\frac{1}{4}$
	B	$3\frac{5}{12}$
Green	A	$2\frac{7}{12}$
	B	$3\frac{7}{8}$
Red	A	$3\frac{1}{2}$
	B	$1\frac{11}{12}$
Yellow	A	$2\frac{3}{8}$
	B	$2\frac{3}{4}$
Orange	A	$3\frac{5}{6}$
	B	$2\frac{1}{3}$



Can you..?

- Convert these fractions to a common denominator and order them from smallest to largest.

$$\frac{3}{5} \quad \frac{5}{12} \quad \frac{3}{10} \quad \frac{17}{30}$$

- Explain how to find out which fraction of a pizza is the largest, between $\frac{39}{48}$ and $\frac{27}{32}$