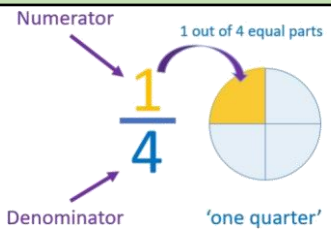
Castlefield School- Maths

Topic: Fractions	Year: Three	Theme: Fractions

Key concepts and questions

What are unit and non-unit fractions?

Unit fractions have a numerator of 1
Non-unit fractions have a numerator greater than 1.



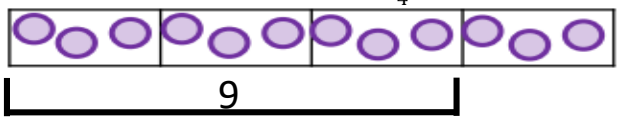
How do you find a fraction of a shape or set of objects?

There are 6 equal parts so the denominator is 6.
1 part is red, $\frac{1}{6}$ is red.
3 parts are yellow, $\frac{3}{6}$ are yellow.
2 parts are blue, $\frac{2}{6}$ are blue.

How do you find a fraction of an amount?

Use a bar model to split the whole into equal parts of the fraction and then share the amount between the equal parts. Multiply one part by the numerator. E.g. 12÷4=3 3x3=9 $\frac{3}{4}$ of 12=9

$\frac{3}{4}$ of 12



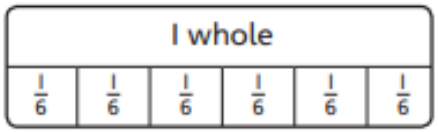
Key Vocabulary

fraction	add	subtract	multiply
divide	greater than	less than	equal to
whole	total amount	whole number	the entire amount
equal parts	equal shares	mixed number	a whole and a fraction
denominator	number of equal parts	set of objects	collection of numbers
numerator	The parts being considered	interval	parts between 2 numbers
unit fraction	numerator = 1	tenths	ten equal parts
non unit fraction	numerator > 1	equivalent	equal to or same as

Representations

Bar Model

Represents how the whole can be split into equal parts and helps to solve fraction problems.



Ten Frames

A ten frame helps to develop an understanding of tenths. There are ten tenths in a whole

Number line

A number line is used to help order fractions. It can also be used to add and subtract fractions.

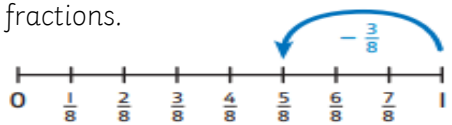


Image	Words	Fraction	Decimal
	One tenth	$\frac{1}{10}$	0.1
	Nine tenths		

Making connections

Adding and subtracting	When adding and subtracting fractions with the same denominator, the numerators can be calculated like a normal equation.
Multiplication and division	Use known multiplication and division facts to find equivalent fractions. e.g. $\frac{1}{2} = \frac{2}{4} = \frac{4}{8}$ Both the numerator and denominator were doubled each time.