



Year: Year 5

Subject: Maths

Title: Fractions B

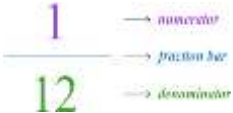


What key knowledge do I need to have before this unit?

- I understand what a fraction is.
 - I can recognise a fraction.
- I can understand what is meant by equivalent fractions.
 - I understand what mixed number fractions are.
- I understand that multiplication is repeated addition

Key outcomes:

What I need to know by the end of this unit of work:

- I can multiply a fraction by an integer
- I can multiply a mixed number by an integer
- I can calculate a fraction of a quantity
- I can find the whole

National Curriculum Links:	Key Vocabulary:	Definition:	
<p>Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number (Y4)</p> <p>Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number.</p> <p>Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams</p>	Equal	being the same in quantity, size, degree, or value	
	Parts	an amount or section which, when combined with others, makes up the whole of something	
	Unit fraction	A unit fraction is a positive fraction with one as its numerator	
	Non unit fraction	A non-unit fraction is a fraction with a numerator (top number) greater than 1	
	Improper fraction	An improper fraction is defined as a fraction whose numerator is greater than the denominator	
	Mixed number fraction	A mixed number, also sometimes called a mixed fraction, is an integer (whole number) and a fraction (part of a whole number).	
	Denominator	the number below the line in a vulgar fraction; a divisor	
	Numerator	the number above the line in a vulgar fraction showing how many of the parts indicated by the denominator are taken, for example, 2 in $2/3$	
Multiply	A mathematical operation that indicates how many times a number is added to itself		

Fractions B

Fractions: Recognise and write

Year 1	Year 2	Year 3	Year 4	Year 5
<ul style="list-style-type: none"> recognise, find and name a half as one of two equal parts of an object, shape or quantity recognise, find and name a quarter as one of four equal parts of an object, shape or quantity 	<ul style="list-style-type: none"> recognise, find, name and write fractions $\frac{1}{3}, \frac{1}{4}, \frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity 	<ul style="list-style-type: none"> count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators 	<ul style="list-style-type: none"> count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. 	<ul style="list-style-type: none"> identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$]

Fractions: Compare

Year 1	Year 2	Year 3	Year 4	Year 5
	<ul style="list-style-type: none"> Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ 	<ul style="list-style-type: none"> recognise and show, using diagrams, equivalent fractions with small denominators compare and order unit fractions, and fractions with the same denominators 	<ul style="list-style-type: none"> recognise and show, using diagrams, families of common equivalent fractions 	<ul style="list-style-type: none"> compare and order fractions whose denominators are all multiples of the same number

Fractions: Calculations

Year 1	Year 2	Year 3	Year 4	Year 5
	<ul style="list-style-type: none"> write simple fractions for example, $\frac{1}{2}$ of 6 = 3 	<ul style="list-style-type: none"> add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$] 	<ul style="list-style-type: none"> add and subtract fractions with the same denominator 	<ul style="list-style-type: none"> add and subtract fractions with the same denominator and denominators that are multiples of the same number multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams

Fractions: Solve problems

Year 1	Year 2	Year 3	Year 4
		<ul style="list-style-type: none"> solve problems that involve all of the above 	<ul style="list-style-type: none"> solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number