

## Maths Objectives – Fractions

Key Stage	Objective	Child Speak Target
KS 1 Y1	Recognise, find and name a half as one of two equal parts of an object, shape or quantity.	<i>I know that a half is one of two equal parts, and I find half of a shape or a set of objects by sharing the shape or set into two equal parts.</i>
KS 1 Y1	Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.	<i>I find a quarter of a shape or a set of objects by sharing the shape or set into four equal parts.</i>
KS 1 Y2	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.	<i>I can find <math>\frac{1}{3}</math> or <math>\frac{1}{4}</math> or <math>\frac{2}{4}</math> or <math>\frac{3}{4}</math> of a shape, length or set of objects.</i>
KS 1 Y2	Write simple fractions for example, $\frac{1}{2}$ of $6 = 3$ and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ .	<i>I can write simple fractions sentences such as <math>\frac{1}{2}</math> of <math>6 = 3</math> and know that <math>\frac{2}{4}</math> equals <math>\frac{1}{2}</math>.</i>
KS 2 Y3	Count up and down in tenths.	<i>I can count up and down in tenths.</i>
KS 2 Y3	Recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10.	<i>I know that tenths can be found by dividing an object or shape into ten equal parts or by dividing numbers by 10.</i>
KS 2 Y3	Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.	<i>I can find a fraction (such as <math>\frac{2}{5}</math> or <math>\frac{3}{4}</math>) of a set of objects.</i>
KS 2 Y3	Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.	<i>I know how to find fractions of a number or shape - such as <math>\frac{3}{5}</math>, <math>\frac{1}{4}</math> or <math>\frac{4}{6}</math>.</i>
KS 2 Y3	Recognise and show, using diagrams, equivalent fractions with small denominators.	<i>I can show that some fractions have the same value - such as <math>\frac{1}{2}</math>, <math>\frac{3}{6}</math> and <math>\frac{5}{10}</math> or <math>\frac{1}{3}</math> and <math>\frac{3}{9}</math>.</i>
KS 2 Y3	Add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$ ].	<i>I can add and subtract fractions with the same denominator [for example, <math>\frac{5}{7} + \frac{1}{7} = \frac{6}{7}</math>].</i>
KS 2 Y3	Compare and order unit fractions, and fractions with the same denominators.	<i>I can compare and order unit fractions, and fractions with the same denominators.</i>
KS 2 Y3	Solve problems that involve my understanding of fractions.	<i>I solve problems that finding, ordering or comparing fractions.</i>
KS 2 Y4	Recognise and show, using diagrams, families of common equivalent fractions.	<i>I can show in drawings why a number of fractions equal each other (such as <math>\frac{3}{5}</math> and <math>\frac{6}{10}</math>) and are called equivalent fractions.</i>
KS 2 Y4	Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.	<i>I can count up and down in hundredths and know that a hundredth is made by dividing an object by one hundred and a tenth is made by dividing an object by ten.</i>
KS 2 Y4	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.	<i>I can work out the fractions of numbers such as <math>\frac{4}{5}</math> of 25 or <math>\frac{7}{10}</math> of 700.</i>
KS 2 Y4	Add and subtract fractions with the same denominator.	<i>I can add and subtract fractions with the same denominator.</i>
KS 2 Y4	Recognise and write decimal equivalents of any number of tenths or hundredths.	<i>I can tell you the decimal equivalents of any number of tenths or hundredths - such as <math>\frac{1}{10} = 0.1</math> and <math>\frac{23}{100} = 0.23</math>.</i>
KS 2 Y4	Recognise and write decimal equivalents to $\frac{1}{4}$ , $\frac{1}{2}$ , $\frac{3}{4}$ .	<i>I know what the decimal equivalents are for <math>\frac{1}{4}</math>, <math>\frac{1}{2}</math> and <math>\frac{3}{4}</math>.</i>
KS 2 Y4	Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths.	<i>I can divide a one- or two-digit number by 10 and 100 and I know what the tenths and hundredths mean after the decimal point.</i>
KS 2 Y4	Round decimals with one decimal place to the nearest whole number.	<i>I can round decimals with one decimal place to the nearest whole number.</i>
KS 2 Y4	Compare numbers with the same number of decimal places up to two decimal places.	<i>I can compare numbers such as 0.26 and 0.56 to say which is bigger or lower.</i>
KS 2 Y4	Solve simple measure and money problems involving fractions and decimals to two decimal places.	<i>I can solve measure and money problems involving fractions and decimals to two decimal places.</i>
KS 2 Y5	Compare and order fractions whose denominators are all multiples of the same number.	<i>I can compare and order fractions whose denominators are all multiples of the same number.</i>
KS 2 Y5	Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.	<i>I can name and write equivalent fractions of a given fraction, and show these in a drawing (including tenths and hundredths).</i>
KS 2 Y5	Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements greater than 1 as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1 \frac{1}{5}$ ].	<i>I know what mixed numbers and improper fractions are and I can convert from one to the other [for example, <math>\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1 \frac{1}{5}</math>].</i>

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KS 2 Y5	Add and subtract fractions with the same denominator and denominators that are multiples of the same number.	<i>I can add and subtract fractions with the same denominator and denominators that are multiples of the same number.</i>
KS 2 Y5	Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.	<i>I use diagrams and some fraction tools to multiply proper fractions (7/10) and mixed numbers (1 7/10) by whole numbers.</i>
KS 2 Y5	Read and write decimal numbers as fractions [for example, 0.71 = 71/100].	<i>I can read and write decimal numbers as fractions [for example, 0.71 = 71/100].</i>
KS 2 Y5	Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.	<i>I know what thousandths are and how to use them with tenths, hundredths and decimals.</i>
KS 2 Y5	Round decimals with two decimal places to the nearest whole number and to one decimal place.	<i>I can round decimals with two decimal places to the nearest whole number and to one decimal place.</i>
KS 2 Y5	Read, write, order and compare numbers with up to three decimal places.	<i>I can read, write, order and compare numbers with up to three decimal places.</i>
KS 2 Y5	Solve problems involving number up to three decimal places.	<i>I can solve problems involving numbers with up to three decimal places.</i>
KS 2 Y5	Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal.	<i>I know what the per cent symbol is (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal.</i>
KS 2 Y5	Solve problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25.	<i>I work on problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25.</i>
KS 2 Y6	Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.	<i>I can use common factors to simplify fractions and use common multiples to express fractions in the same denomination.</i>
KS 2 Y6	Compare and order fractions, including fractions greater than 1.	<i>I can compare and order fractions, including fractions greater than 1.</i>
KS 2 Y6	Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.	<i>I add and subtract fractions with different denominators and mixed numbers.</i>
KS 2 Y6	Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, 1/4 × 1/2 = 1/8].	<i>I can multiply fractions such as 1/4 × 1/2 = 1/8.</i>
KS 2 Y6	Divide proper fractions by whole numbers [for example, 1/3 ÷ 2 = 1/6].	<i>I know how to divide proper fractions by whole numbers [for example, 1/3 ÷ 2 = 1/6].</i>
KS 2 Y6	Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8].	<i>I can change a fraction into a decimal - for example, I can change 3/8 to 0.375 by dividing 3 by 8 and multiplying by 1000.</i>
KS 2 Y6	Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places.	<i>I can multiply and divide numbers by 10, 100 and 1000 and know what each digit means up to three decimal places.</i>
KS 2 Y6	Multiply one-digit numbers with up to two decimal places by whole numbers.	<i>I can multiply numbers such as 1.45 by a one digit number - for example 1.45 × 7.</i>
KS 2 Y6	Use written division methods in cases where the answer has up to two decimal places.	<i>I use written division methods in cases where the answer has up to two decimal places.</i>
KS 2 Y6	Solve problems which require answers to be rounded to specified degrees of accuracy.	<i>I can solve problems which include rounding to a required accuracy such as the nearest 10, 100 or 10000.</i>
KS 2 Y6	Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.	<i>I know the decimal value, percentage and fraction of a range of values - such as 0.5, 50 per cent and 1/2.</i>
KS3	Work interchangeably with terminating decimals and their corresponding fractions (such as 3.5 and 7/2 or 0.375 and 3/8).	
KS3	Define percentage as 'number of parts per hundred', interpret percentages and percentage changes as a fraction or a decimal, interpret these multiplicatively, express one quantity as a percentage of another, compare two quantities using percentages, and work with percentages greater than 100%.	
KS3	Interpret fractions and percentages as operators.	