



Content domain – fractions, decimals and percentages

Strand	National Curriculum reference Year 1	National Curriculum reference Year 2	National Curriculum reference Year 3	National Curriculum reference Year 4	National Curriculum reference Year 5	National Curriculum reference Year 6
F1 Recognise, find, write, name and count fractions	1F1a Recognise, find and name a half as one of two equal parts of an object, shape or quantity	2F1a 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	3F1a 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	4F1 Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten		
	1F1b Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity	2F1b Write simple fractions [e.g.: $\frac{1}{2}$ of 6 = 3]	3F1b Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators			
			3F1c Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators			
F2 Equivalent fractions		2F2 Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$	3F2 Recognise and show, using diagrams, equivalent fractions with small denominators	4F2 Recognise and show, using diagrams, families of common equivalent fractions	5F2a Recognise mixed numbers and improper fractions and convert from one form to the other; write mathematical statements >1 as a mixed number [e.g.: $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1 \frac{1}{5}$]	6F2 Use common factors to simplify fractions; use common multiples to express fractions in the same denomination
					5F2b Identify name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	

F3 Comparing and ordering fractions [KS2]			3F3 Compare and order unit fractions and fractions with the same denominators		5F3 Compare and order fractions whose denominators are all multiples of the same number	6F3 Compare and order fractions, including fractions >1
F4 Add / subtract fractions [KS2]			3F4 Add and subtract fractions with the same denominator within one whole [e.g.: $5/7 + 1/7 = 6/7$]	4F4 Add and subtract fractions with the same denominator	5F4 Add and subtract fractions with the same denominator and denominators that are multiples of the same number	6F4 Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
F5 Multiply / divide fractions [KS2]					5F5 Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	6F5a Multiply simple pairs of proper fractions, writing the answer in its simplest form [e.g.: $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$]
						6F5b Divide proper fractions by whole numbers [e.g.: $\frac{1}{3} \div 2 = \frac{1}{6}$]
F6 Fractions / decimals equivalence				4F6a Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$	5F6a Read and write decimal numbers as fractions [e.g.: $0.71 = \frac{71}{100}$]	6F6 Associate a fraction with division to calculate decimal fraction equivalents (e.g.: 0.375) for a simple fraction [e.g.: $\frac{3}{8}$]
				4F6b Recognise and write decimal equivalents of any number of tenths or hundredths	5F6b Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	
F7 Rounding decimals [KS2]				4F7 Round decimals with one decimal place to the nearest whole number	5F7 Round decimals with two decimal places to the nearest whole number and to one decimal place	
F8 Compare and order decimals [KS2]				4F8 Compare numbers with the same number of decimal places up to two decimal places	5F8 Read, write, order and compare numbers with up to three decimal places	
F9 Multiply / divide decimals [KS2]				4F9 Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the		6F9a Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving

				answer as ones, tenths and hundredths		answers up to three decimal places
						6F9b Multiply one-digit numbers with up to two decimal places by whole numbers
						6F9c Use written division methods in cases where the answer has up to two decimal places
F10 Solve problems with fractions and decimals [KS2]			3F10 Solve problems that involve 3F1–3F4	4F10a 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	5F10 Solve problems involving numbers up to three decimal places	6F10 Solve problems which require answers to be rounded to specified degrees of accuracy
				4F10b Solve simple measure and money problems involving fractions and decimals to two decimal places		
F11 Fractions / decimal / percentage equivalence [KS2]					5F11 Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred'; write percentages as a fraction with denominator hundred, and as a decimal	6F11 Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts
F12 Solve problems with percentages [KS2]					5F12 Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25	