Progression in Fractions

Strand	Year 1	Year 2	Year 3	Year 4	Year 5	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 1/3, ¼ , 2/4 and ¾ 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.: ½ 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 2/4 and ½	**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.: 2/5 + 4/5 = 6/5= 1 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.: ¼ × ½ = 1/8]
						6F5b Divide proper fractions by whole numbers [e.g.: 1/3 ÷ 2 = 1/6]

Strand	Y1	Y2	Y3	Y4	Y5	Y6
F6 Fractions / decimals equivalence				**4F6a** Recognise and write decimal equivalents to ¼, ½, 3/4	**5F6a** Read and write decimal numbers as fractions [e.g.: 0.71 = 71/100]	**6F6** Associate a fraction with division to calculate decimal fraction equivalents (e.g.: 0.375) for a simple fraction [e.g.: 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 answer as ones, tenths and hundredths		**6F9a** Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving 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 ½, ¼, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25	