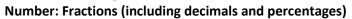


Progression in Mathematics

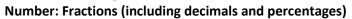




Counting in Fractional Steps							
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6		
	Pupils should count in fractions up to 10, starting from any number and using the 1/2 and 2/4 equivalence on the number line. (Non Statutory Guidance).	Count up and down in tenths.	Count up and down in hundredths.				
	,	Recognisin	g Fractions				
Recognise, find and name a half as one of two equal parts of an object, shape or quantity.	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.	Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. Recognise that tenths arise from dividing an object into 10 equal parts and in dividing one – digit numbers or quantities by 10.	Recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.	Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. (Appears also in Equivalence).			
Recognise, find and name a quarter as one of four		Recognise and use fractions as numbers: unit					
equal parts of an object, shape or quantity.		fractions and non-unit fractions with small denominators.					
Comparing Fractions							
		Compare and order unit fractions, and fractions with the same denominators.		Compare and order fractions whose denominators are all multiples of the same number.	Compare and order fractions, including fractions >1		



Progression in Mathematics





Comparing Decimals							
Year 1 Year 2 Ye		Year 3	Year 4	Year 5	Year 6		
			Compare numbers with the	Read, write, order and compare	Identify the value of each digit		
			same number of decimal	numbers with up to three decimal	in numbers given to three		
			places up to two decimal	places.	decimal places.		
			places.				
			Rounding including Deci	mals			
			Round decimals with one	Round decimals with two decimal	Solve problems which require		
			decimal place to the nearest	places to the nearest whole number	answers to be rounded to		
			whole number.	and to one decimal place.	specified degrees of accuracy.		
		Fauivalor		·	specified degrees of accuracy.		
	Muito simula fuestione		nce (including Fractions, Decima		Line as we want of the state of the		
	Write simple fractions	Recognise and	Recognise and show, using	Identify, name and write equivalent	Use common factors to		
	e.g. $^{1}/_{2}$ of 6 = 3 and	show, using	diagrams, families of	fractions of a given fraction,	simplify fractions; use common		
	recognise the	diagrams,	common equivalent	represented visually, including tenths	multiples to express fractions		
		equivalent	fractions.	and hundredths.	in the same denomination.		
	equivalence of ² / ₄ and	fractions with small					
	¹ / ₂ .	denominators.					
	. 2						
			Recognise and write decimal	Read and write decimal numbers as	Associate a fraction with		
			equivalents of any number	fractions (e.g. $0.71 = \frac{1}{100}$)	division and calculate decimal		
			of tenths or hundredths.	100	fraction equivalents (e.g.		
				Recognise and use thousandths and	0.375) for a simple fraction		
					(e.g. ³ / ₈)		
				relate them to tenths, hundredths and	8		
				decimal equivalents.			
			Recognise and write decimal	Recognise the per cent symbol (%) and	Recall and use equivalences		
			equivalents to $\frac{1}{4}$; $\frac{1}{2}$; $\frac{3}{4}$	understand that per cent relates to	between simple fractions,		
			4, 12, 14	"number of parts per hundred", and	decimals and percentages,		
				write percentages as a fraction with	including in different contexts.		
				denominator 100 as a decimal fraction.			



Progression in Mathematics



Number: Fractions (including decimals and percentages)

Addition and Subtraction of Fractions						
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
		Add and subtract fractions with the same denominator within one whole (e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$)	Add and subtract fractions with the same denominator.	Add and subtract fractions with the same denominator and multiples of the same number. Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number (e.g. $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = \frac{1}{5}$)	Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.	
		Multiplication and I	Division of Fractions			
				Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.	Multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g. $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$) Multiply one-digit numbers with up to two decimal places by whole numbers. Divide proper fractions by whole numbers (e.g. $\frac{1}{3} \div 2 = \frac{1}{6}$)	
					2-161	



Progression in Mathematics



Number: Fractions (including decimals and percentages)

Multiplication and Division of Decimals					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
					Multiply one-digit numbers with up to two decimal places by whole numbers.
			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.		Multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places.
					Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places.
					Associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. ³ / ₈).
					Use written division methods in cases where the answer has up to two decimal places.







Problem Solving						
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
		Solve problems that involve all of the above.	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.	Solve problems involving numbers up to three decimal places.		
			Solve simple measure and money problems involving fractions and decimals to two decimal places.	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 with a denominator of a multiple of 10 or 25.		