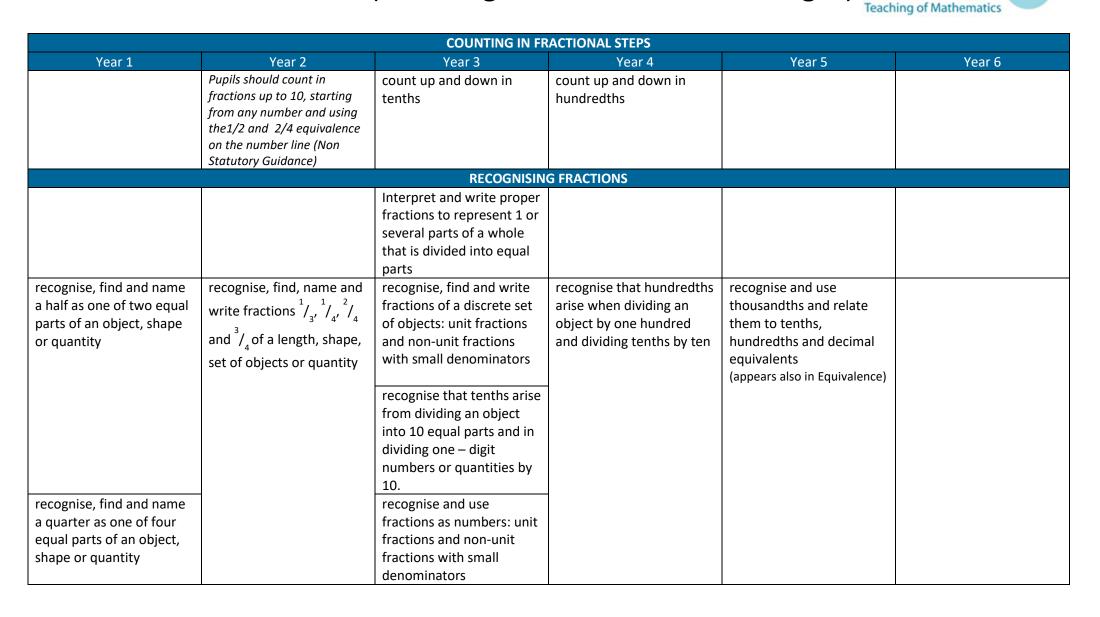
Number: Fractions (including Decimals and Percentages) National Centre









Number: Fractions (including Decimals and Percentages)



	Reason about the location of any fraction within 1 in the linear number system. COMPARING compare and order unit fractions, and fractions with the same denominators	Reason about the location of mixed numbers in the linear number system. FRACTIONS	compare and order fractions whose denominators are all multiples of the same number	Compare fractions with different denominators, including fractions greater than 1, using reasoning, and choose between reasoning and common denomination as a comparison strategy. Express fractions in a common denomination and use this to compare fractions that are similar in value. compare and order		
				in value. compare and order fractions, including fractions >1		
FRACTIONS AS OPERATORS						
	Find unit fractions of quantities using known division facts (multiplication tables fluency).		Find non-unit fractions of quantities.			







Education

Number: Fractions (including Decimals and Percentages)

	COMPARING DECIMALS							
Year 1	Year 2	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 DECIMALS							
			round decimals with one	round decimals with two decimal places	solve problems which require			
			decimal place to the nearest	to the nearest whole number and to	answers to be rounded to			
			whole number	one decimal place	specified degrees of accuracy			
		EQUIVALENCE	(INCLUDING FRACTIONS, DECIN	MALS AND PERCENTAGES)				
			convert mixed numbers to improper fractions and vice versa					
	write simple fractions e.g. $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.	recognise and show, using diagrams, equivalent fractions with small denominators	recognise and show, using diagrams, families of common equivalent fractions	find equivalent fractions and understand that they have the same value and the same position in the linear number system identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	use common factors to simplify fractions; use common multiples to express fractions in the same denomination Recognise when fractions can be simplified, and use common factors to simplify fractions.			
			recognise and write decimal equivalents of any number of tenths or hundredths	read and write decimal numbers as fractions (e.g. $0.71 = \frac{71}{100}$) Recall decimal fraction equivalents for 1/2, $1/4$, $1/5$ and $1/10$, and for multiples of these proper fractions.	associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. $\frac{3}{8}$)			



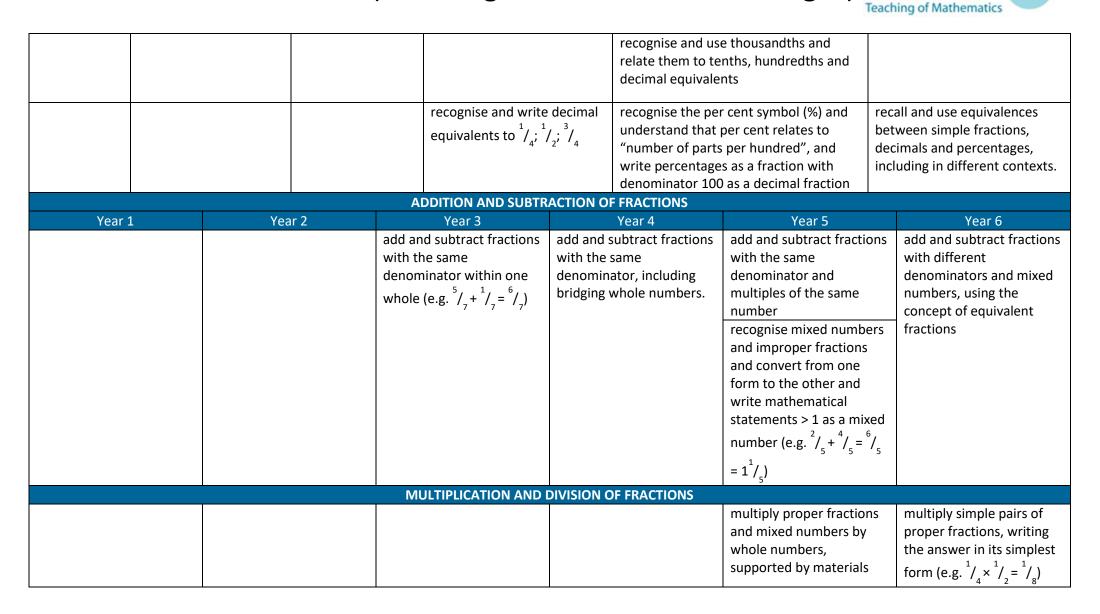




National Centre

for Excellence in the Teaching of Mathematics

Number: Fractions (including Decimals and Percentages) National Centre











Number: Fractions (including Decimals and Percentages) National Centre Teaching of Mathematics

				and diagrams	multiply one-digit numbers with up to two decimal places by whole numbers divide proper fractions by whole numbers (e.g. $\frac{1}{3}$; $2 = \frac{1}{6}$)
	Year 2		DIVISION OF DECIMALS		
Year 1		Year 3	Year 4 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	Year 5	Year 6multiply one-digitnumbers with up to twodecimal places by wholenumbersmultiply and dividenumbers by 10, 100 and1000 where the answersare up to three decimalplaces
					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







STEM

myscience -

Number: Fractions (including Decimals and Percentages) National Centre Teaching of Mathematics

					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 $1/2$, $1/4$, $1/5$, 2/5, $4/5$ and those with a denominator of a multiple of 10 or 25.			



TRIBAL

