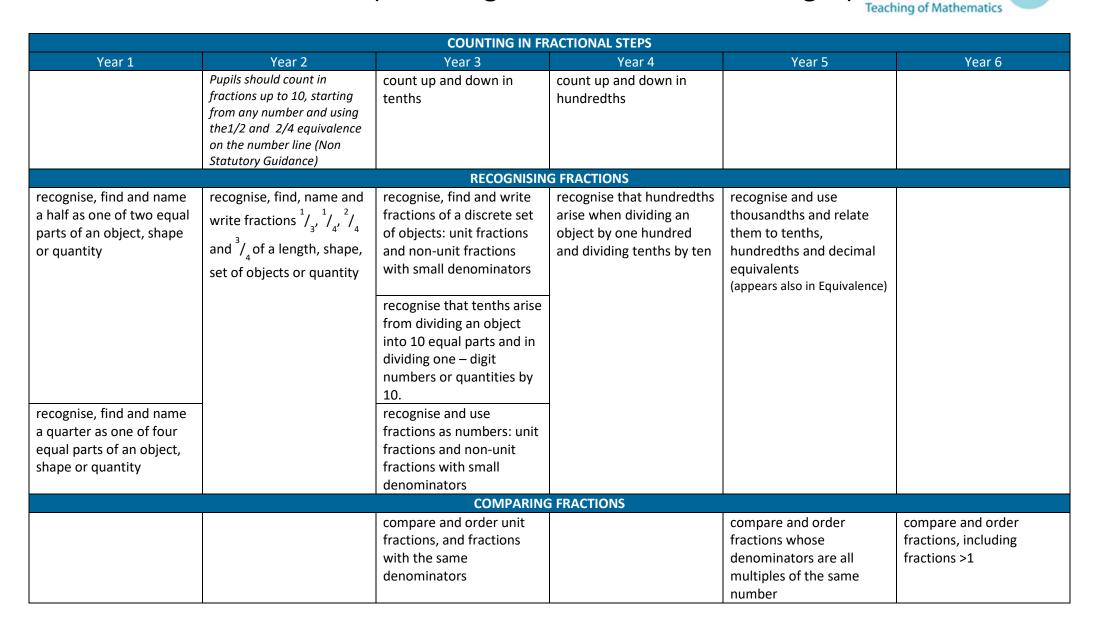
#### National Centre Number: Fractions (including Decimals and Percentages) for Excellence in the









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 same number of decimal	read, write, order and compare numbers with up to three decimal	identify the value of each digit in numbers given to three						
			places up to two decimal places	places	decimal places						
ROUNDING INCLUDING DECIMALS											
			round decimals with one decimal place to the nearest whole number	round decimals with two decimal places to the nearest whole number and to one decimal place	solve problems which require answers to be rounded to specified degrees of accuracy						
	EQUIVALENCE (INCLUDING FRACTIONS, DECIMALS AND PERCENTAGES)										
	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	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 and write decimal equivalents of any number of tenths or hundredths	read and write decimal numbers as fractions (e.g. $0.71 = \frac{71}{100}$ ) recognise and use thousandths and	associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction						
				relate them to tenths, hundredths and decimal equivalents	(e.g. <sup>3</sup> / <sub>8</sub> )						
			recognise and write decimal equivalents to $\frac{1}{4}$ ; $\frac{1}{2}$ ; $\frac{3}{4}$	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 as a decimal fraction	recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.						







National Centre

for Excellence in the Teaching of Mathematics

### Number: Fractions (including Decimals and Percentages)



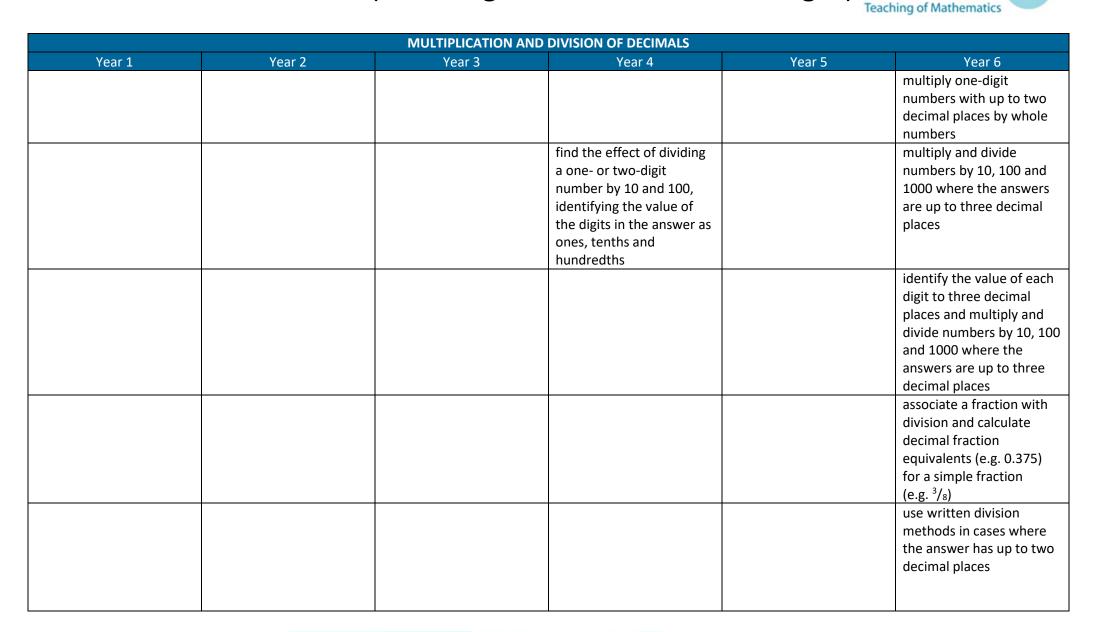
ADDITION AND SUBTRACTION OF FRACTIONS								
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6			
		add and subtract fractions with the same denominator within one whole (e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$ )	add and subtract fractions with the same denominator	add and subtract fractions with the 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. $\frac{2}{5} + \frac{4}{5} = \frac{6}{5}$ = $1^{1}/_{5}$ )	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. $1/4 \times 1/2 = 1/8$ ) multiply one-digit numbers with up to two decimal places by whole numbers			
					divide proper fractions by whole numbers (e.g. $\frac{1}{3}$ ; $2 = \frac{1}{6}$ )			







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### Number: Fractions (including Decimals and Percentages)



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.				



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