FRACTIONS, DECIMALS & PERCENTAGES - KNOWLEDGE & SKILLS PROGRESSION

	KEY STAGE 1		LOWER KEY STAGE 2				UPPER KEY STAGE 2			
	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5	YEAR 6
COUNTING IN FRACTIONAL STEPS			2.35	count in fractions up to 10, starting from any number and using the1/2 and 2/4 equivalence on the number line	3.35	count up and down in tenths	4.35	count up and down in hundredths		
RECOGNISING FRACTIONS	1.36	recognise, find and name a half as one of two equal parts of an object, shape or quantity	2.36	recognise, find, name and write fractions $^1/_3$, $^1/_4$, $^2/_4$ and $^3/_4$ of a length, shape, set of objects or quantity	3.36	recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators	4.36	recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten	5.36	recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
					3.37	recognise tenths arise from dividing an object into 10 equal parts and in dividing one – digit numbers or quantities by 10.				
	1.38	recognise, find and name a quarter as one of four equal parts of an object, shape or quantity			3.38	recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators				
COMPARING FRACTIONS					3.39	compare and order unit fractions, and fractions with the same denominators			5.39	compare and order fractions whose denominators are all multiples of the same number	6.39	compare and order fractions, including fractions >1
COMPARING DECIMALS							4.40	compare numbers with the same number of decimal places up to two	5.40	read, write, order and compare numbers with up to three decimal places	6.40	identify the value of each digit in numbers given to three decimal places

ROUNDING INCLUDING DECIMALS				decimal places			
			4.41	round decimals with one decimal place to the nearest whole number	5.41	round decimals with two decimal places to the nearest whole number and to one decimal place	6.41	solve problems which require answers to be rounded to specified degrees of accuracy
EQUIVALENCE	2.42	write simple fractions e.g. $^1/_2$ of 6 = 3 and recognise the equivalence of $^2/_4$ and $^1/_2$.	3.42	recognise and show, using diagrams, equivalent fractions with small denominators	4.42	recognise and show, using diagrams, families of common equivalent fractions	5.42	identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	6.42	use common factors to simplify fractions; use common multiples to express fractions in the same denomination
					4.43	recognise and write decimal equivalents to any number of tenths or hundredths	5.43	read and write decimal numbers as fractions (e.g. 0.71 = $^{71}/_{100}$)	6.43	associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. $^3/_8$)
							5.44	recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents		
					4.45	recognise and write decimal equivalents to $^1/_4$; $^1/_2$; $^3/_4$	5.45	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	6.45	recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

ADDITION & SUBTRACTION OF FRACTIONS				3.46	add and subtract fractions with the same denominator within one whole (e.g. $^5/_7 + ^1/_7 = ^6/_7$)	4.46	add and subtract fractions with the same denominator	5.46	add and subtract fractions with the same denominator and multiples of the same number	6.46	add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
								5.47	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. $^2/_5 + ^4/_5 = ^6/_5 = 1^1/_5$)		
MULTIPLICATION & DIVISION OF FRACTIONS								5.48	multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	6.48	multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g. $^1/_4 \times ^1/_2 = ^1/_8$)
										6.49	multiply one-digit numbers with up to two decimal places by whole numbers
										6.50	divide proper fractions by whole numbers (e.g. $^1/_3 \div 2 = ^1/_6$)
MULTIPLICATION & DIVISION OF										6.51	multiply one-digit numbers with up to two decimal places by whole numbers

				4.52 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		6.52 multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places
						6.53 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
						6.54 associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. $^{3}/_{8}$)
						6.55 use written division methods in cases where the answer has up to two decimal places
PROBLEM SOLVING			3.56 solve problems that involve all of the above	4.56 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	5.56 solve problems involving numbers up to three decimal places	

				4.57	solve simple measure and money problems involving fractions and decimals to two decimal places.	5.57	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.