Fractions, decimals and percentages						
Rec/ELG	**Y1**	**Y2**	**Y3**	**Y4**	**Y5**	**Y6**
						Associate a fraction with division & calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. 3/8).
Solve problems, including **doubling, halving & sharing**. ELG	Recognise, find & name a **half** as one of two equal parts of an object, shape or quantity. Recognise, find & name a **quarter** as one of four equal parts of an object, shape or quantity.	Recognise, find, name & write fractions **1/3, 1/4, 2/4,** and **3/4** or a length, shape, set of objects or quantity.		Recognise & show, using diagrams, families of common **equivalent fractions**. Recognise & write **decimal equivalents** on any number of tenths or hundredths. Recognise & write **decimal equivalents** to ¼, ½, ¾.	Identify, name & write **equivalent fractions** of a given fraction, represented visually, incl tenths & hundredths. **Read & write decimal numbers** as fractions (e.g. 0.71 = 71/100).	Identify the **value of each digit to three decimal places** and multiply & divide numbers by 10, 100 and 1000 where the answers are up to three decimal places
				Find the effect of dividing a 1-digit or 2-digit number by 10 and 100, identifying the value of the digits in the answer as units, tenths and hundredths.		
		Write simple fractions, e.g. ½ or 6 =3 and recognise the **equivalence** of 2/4 & 1/2.	**Count up & down** in tenths; recognise that tenths arise from dividing an object into 10 equal parts & in dividing 1-digit numbers or quantities by 10.	**Count up & down** in hundredths; recognise that hundredths arise when dividing an object by a hundred & dividing tenths by ten.	**Recognise & use thousandths** & relate then to tenths, hundredths & decimal equivalents.	
					Recognise mixed numbers & improper fractions & convert from one form to the other & write mathematical statements.	
			Compare & order unit fractions, & fractions with the same denominators.		**Compare & order** fractions whose denominators are all multiples of the same number.	**Compare & order fractions**, including fractions >1. Use common factors to simplify fractions; use common multiples to express fractions in the same denomination
			Recognise, find & write fractions or a discrete set of objects: unit fractions & non-unit fractions with small denominators			
			Recognise & use fractions as numbers: unit fractions & non-unit fractions with small denominators.			
			Recognise & show, using diagrams, equivalent fractions with small denominators.			
			Add & subtract fractions with the same denominator within one whole (e.g. 5/7+1/7=6/7)	**Add & subtract fractions** with the same denominator.	**Add & subtract fractions** with the same denominator & multiples of the same number.	**Add & subtract fractions** with different denominat mixed numbers, usin concept of equivale

						fractions.
					Multiply proper fractions & mixed numbers by whole numbers, supported by materials & diagrams.	**Multiply** simple pairs of proper fractions, writing the answer in its simplest form (e.g. ¼ x ½ = 1/8)
						Multiply 1-digit numbers with up to two decimal places by whole numbers.
						Divide proper fractions by whole numbers (e.g. 1/3 ÷ 2 = 1/6). Use written division methods in cases where the answer has up to two decimal places.
				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.	
				Compare numbers with the same number of decimal places up to **two decimal places**.	Read, write, order and **compare numbers** with up to **three decimal places**.	
					Recognise the **per cent symbol** (%) & understand that per cent relates to 'number or parts per hundred', and write percentages as a fraction with denominator hundred, and as a decimal fraction.	
						Recall & use **equivalences** between simple fractions, decimals & percentages, including in different contexts.
					Solve problems which require knowing **percentage & decimal equivalents** of ½, ¼, 1/5, 2/5, 4/5 and those with a denominator of a multiple of 10 or 25.	Solve problems involving the **calculation of percentages** of whole numbers or measures such as 15% of 360 and the use of percentages for comparison.*
			Solve problems that involve all of the above.	**Solve problems** involving increasingly harder fractions to calculate quantities, & fractions to divide quantities, including non-unit fractions where the answer is a whole number. Solve simple measure & money problems involving fractions & decimals to two decimal places.	**Solve problems** involving number up to three decimal places.	**Solve problems** which require answers to be rounded to specified degrees of accuracy.