



Progression in Mathematics: Fractions, Decimals, Percentages

	Y1	Y2	Y3	Y4	Y5	Y6
Fractions: Recognise and Write	- Recognise, find and name a half as one of the two equal parts of an object, shape or quantity. - Recognise, find and name a quarter as one of the two equal parts of an object, shape or quantity	Recognise, find, name and write fractions $\frac{1}{2}$ $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity.	- Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10. - Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. - Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.	Count up and down in hundredths; recognise that they arise when dividing an object by 100 and tenths by 10.	- identify name and write equivalent fractions for a given fraction, shown visually, including tenths and hundredths. - Recognise mixed numbers and improper fractions and convert from one to the other and write mathematical statements that are > 1	
Fractions: Compare		Recognise the equivalence of $\frac{1}{2}$ and $\frac{2}{4}$	- Recognise and show, using diagrams, equivalent fractions with small denominators. - Compare and order unit fractions, and fractions with the same denominators.	Recognise and show, using diagrams, families of common equivalent fractions.	Compare and order fractions whose denominators are all multiples of the same number.	- Use common factors to simplify fractions and use common multiples to express fractions in the same denomination. - Compare and order fractions, including those larger than 1.
Fractions: Calculations		Write simple fractions such as $\frac{1}{2}$ of $6 = 3$	Add and subtract fractions with the same denominator within one whole: $\frac{1}{7} + \frac{2}{7} = \frac{3}{7}$	Add and subtract fractions with the same denominator	- Add and subtract fractions with the same denominator and denominators that are multiples of the same number. - Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.	- Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalence. - Multiply simple pairs of proper fractions, writing the answer in its simplest form. - Divide proper fractions by whole numbers.



Progression in Mathematics: Fractions, Decimals, Percentages

	Y1	Y2	Y3	Y4	Y5	Y6
Fractions: Solve Problems			Solve problems that involve all of the previous.	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.		
Decimals: Recognise and Write				- Recognise and write decimal equivalents of any number of tenths or hundredths. - Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$.	- Read and write decimal numbers as fractions ($0.71 = 71/100$) - Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.	Identify the value of each digit in numbers given the three decimal places.
Decimals: Calculations and Problems				Find the effect of dividing a one- or two-digit number by 100, identifying the value of the digits in the answers as ones, tenths and hundredths.	Solve problems involving numbers up to three decimal places.	- Multiply and divide numbers by 10, 100 and 1000 giving answers to three decimal places. - Multiply one-digit numbers with up to two decimal places by whole numbers. - Use written division methods in cases where the answer has up to two decimal places.
Fractions, Decimals, Percentages				Solve simple measure and money problems involving fractions and decimals to two decimal places.	- Recognise the percent symbol (%) and understand that percent relates to 'number of parts' and write percentages and fractions over 100 and as decimals. - 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 fractions with a denominator of a multiple of 10 or 25.	- Associate a fraction with division and calculate decimal equivalents for a simple fraction. - Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.