COUNTING IN FRACTIONAL STEPS					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Pupils should count in fractions up to 10, starting from any number and using the1/2 and 2/4 equivalence on the number line	Count up and down in tenths	Count up and down in hundredths and tenths.	Count up and down in tenths, hundredths and thousandths. →	Count up and down in whole number intervals, fractions, decimals and percentages. →
RECOGNISING FRACTIONS					
Recognise, find and name a half as one of two equal parts of an object, shape or quantity	Recognise, find, name and write fractions $^{1}/_{3}$, $^{1}/_{4}$, $^{2}/_{4}$ and $^{3}/_{4}$ of a length, shape, set of objects or quantity	Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators	Recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten	Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents (appears also in Equivalence)	→
		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 name a quarter as one of four equal parts of an object, shape or quantity		Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators			
COMPARING FRACTIONS					
		Compare and order unit fractions, and fractions with the same denominators	→	Compare and order fractions whose denominators are all multiples of the same number	Compare and order fractions, including fractions >1

COMPARING DECIMALS					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			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	Identify the value of each digit in numbers given to three 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. $^1/_2$ of 6 = 3 and recognise the equivalence of $^2/_4$ and $^1/_2$.	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 = $^{71}/_{100}$) Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	Associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. $^3/_8$)
			Recognise and write decimal equivalents to $^1/_4$; $^1/_2$; $^3/_4$	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.

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. $^5/_7 + {}^1/_7 = {}^6/_7$)	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. $^2/_5 + {}^4/_5 = {}^6/_5 = 1{}^1/_5$)	Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
MULTIPLICATION AND 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. $^1/_3 \div 2 = {}^1/_6$)

MULTIPLICATION AND DIVISION OF DECIMALS					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
					Multiply one-digit numbers with up to two decimal places by whole numbers
			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	→	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
					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.	

Year 1 Fractions	
Recognise, find and name a half as one of two equal parts of an object, shape or quantity.	Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.
To recognise a shape or amount has been shared into two equal parts. To share an amount into two equal amounts. To know half can be in different contexts e.g. length, money, time, etc. To read and write the word 'half' and the symbol.	To recognise a shape or amount has been shared into four equal parts. To share an amount into four equal amounts. To know a quarter can be in different contexts e.g. length, money, time, etc. To read and write the word 'quarter' and the symbol.

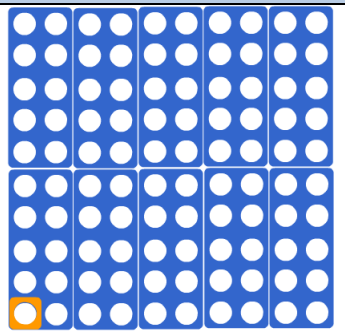
Year 2 Fractions	
Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity	Write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.
To have an understanding of one whole To understand the term equal To divide sets of objects to 20 into 1/2 and 1/4s To understand irregular shapes dividing into $\frac{1}{2}$ and $\frac{1}{4}$ eg cup of water, potato, piece of string. To know a quarter is half a half. Understand that $\frac{3}{4}$ is made up of 3, one quarter parts. To know that a third is sharing or dividing something into 3 equal parts. Counting fractions up to ten from any number (Forwards and backwards).	Know how to write a fraction accurately. Investigate and find how some fractions are equivalent e.g. $\frac{2}{4}$ and $\frac{1}{2}$. Use folding of shapes/ string / answers to calculations to show that they are the same.

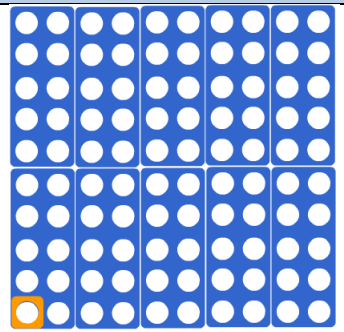
Year 3 Fractions			
Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10.	Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.	Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.	Recognise and show, using diagrams, equivalent fractions with small denominators.
Understand that fractions need to be equal parts Linking fractions to division, understanding for example that 8/10 is actually 8 divided by 10. Start to recognise link between a tenth and 0.1 etc.	Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity Understand how to find one part by dividing and then multiplying to find given fraction. E.g. $\frac{3}{4}$ of 24	Know simple fractions of numbers for example $\frac{1}{2}$ of 6 = 3 Link halving and doubling	To know that when the numerator and denominator are the same it is a whole one. Know simple equivalent fractions for example $\frac{2}{4}$ and $\frac{1}{2}$

Year 3 Fractions			
Add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$]	Compare and order unit fractions, and fractions with the same denominator	Solve problems that involve all of the previous.	
Understand language associated with fractions. Addition can be done in any order, subtraction cannot. To have fast recall of addition and subtraction facts	To recognise simple fractions for example $\frac{1}{2}$ 1/3 $\frac{1}{4}$ of shapes and numbers. Count in simple fractions up to 10 and position on a number line in halves and quarters forwards and backwards.	To know which operation to use to solve a word problem. To understand how division is related to fractions.	

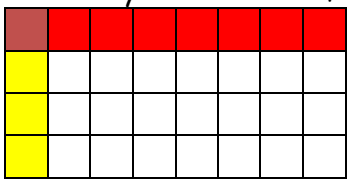
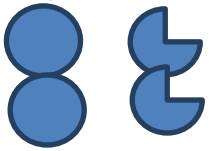
Year 4 Fractions				
Recognise and show, using diagrams, families of common equivalent fractions.	Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten.	Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.	Add and subtract fractions with the same denominator.	Recognise and write decimal equivalents of any number of tenths or hundredths.
Understand vocabulary – fraction, equivalent Represent fractions in different shapes Build fraction walls Using fraction wall to find equivalent fractions	Can count forwards and backwards in 100^{th} Understand how decimals and fractions are linked Know equivalent decimal and fraction $1/10^{th}$ and 100^{th} Use models and images including number lines. Make connections to division.	Non-unit fraction is any fraction where the numerator is greater than 1 Solve problems that involve fractions involving one or more steps Find quantities of numbers	Know that the denominator will stay the same each time To add and subtract numbers - including mixed number s To convert mixed numbers to improper fractions and vice versa	Know equivalent decimal and fraction $1/10^{th}$ and 100^{th} Use models and images including number lines.

Year 4 Fractions				
Recognise and write decimal equivalents to 1/4; 1/2; ¾.	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 units, tenths and hundredths.	Round decimals with one decimal place to the nearest whole number.	Compare numbers with the same number of decimal places up to two decimal places.	Solve simple measure and money problems involving fractions and decimals to two decimal places.
Use calculator to find equivalent decimals Identify position on number line	Can give a value to each digit Recognise landmark numbers, e.g., 10s, 100s etc. Estimate and place nos. on a number line or grid Relate to contexts of Measure, money Recognise change of position of digits when x ÷ 10 , 100	Understand rounding numbers up and down	Understand place value to 100^{th} Relate to money, measure Compare different amounts of money	Solve problems involving one step in relation to money and measures

Year 5 Fractions				
Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.	Compare and order fractions whose denominators are all multiples of the same number.	Read, write, order and compare numbers with up to three decimal places.	Round decimals with two decimal places to the nearest whole number and to one decimal place.	Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.
To know what a 10^{th}, 100^{th} and 1000^{th} represents To understand a whole and how this is broken up. Understanding of place value and its relationship. To be able to link to decimal equivalents. e.g. $^{3}/_{100}$ =0.03 $^{56}/_{100}$ =0.56 $^{63}/_{1000}$ =0.063	To understand and know what a numerator and dominator are. To apply their knowledge of factors and multiples to fractions. To be able to find a lowest common multiple. To be able to find a lowest common multiple of a set of fractions using the denominators as a starting point. To be able to compare and order similar fractions e.g. $^{3}/_{5,}$ $^{7}/_{10,}$ $^{16}/_{25}$ lowest common multiple equals 50, therefore $^{30}/_{50,}$ $^{35}/_{50,}$ $^{32}/_{50}$ Reordered to $^{3}/_{5,}$ $^{16}/_{25,}$ $^{7}/_{10}$	To know what a 10^{th}, 100^{th} and 1000^{th} represents To understand a whole and how this is broken up. Understanding of place value and its relationship.	To apply knowledge of the rules of rounding from previous year groups. Understanding of place value and its relationship. To be able to use and apply decimals in real life context eg money.	 Use visual representations to show fractions that are equivalent such as Numicon, 100 square, Cuisenaire, decimal square. $^{1}/_{100}$ = $^{2}/_{200}$

Year 5 Fractions				
Read and write decimal numbers as fractions (e.g. 0.71 = $^{71}/_{100}$).	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.	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. $^{2}/_{5}$ + $^{4}/_{5}$ = $^{6}/_{5}$ = $1^{1}/_{5}$).	Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
To know what a 10th, 100th and 1000th represents To understand a whole and how this is broken up. Understanding of place value and its relationship. To be able to link to decimal equivalents. e.g. $^{3}/_{100}$ =0.03 $^{56}/_{100}$ =0.56 $^{63}/_{1000}$ =0.063	 Understand the relationships between fractions, decimals and percentages. 13% = 0.13	To know that when you add or subtract a fraction the denominator always stays the same. $^{2}/_{8}$ + $^{4}/_{8}$ = $^{6}/_{8}$	To know what a proper fraction, improper fraction and mixed number is. To know how to convert between improper fractions and mixed numbers.	 Use visual representations to show fractions that are equivalent such as Numicon, 100 square, Cuisenaire, decimal square.

Year 6 Fractions				
Compare and order fractions, including fractions >1.	Identify the value of each digit in numbers given to three decimal places.	Solve problems which require answers to be rounded to specified degrees of accuracy.	Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.	Associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. $^{3}/_{8}$).
Understand decimal conversions. Know pictorially what the fraction would look like. Understand a whole. Understand improper fractions. Identify where on a number line the fraction would appear.	Understand tenths, hundredths and thousandths. Be able to order them explaining why.	Children know which column to look at when rounding. i.e. the one to the right. Know rounding rules. Understand that if the fraction equates to a half or more then it will be rounded to a whole.	Know factors and multiples as well as how they can be worked out. Be able to use knowledge to find same common denominator. Be able to order, add or subtract.	Understand and manipulate rules such as an eighth is a whole, halved, halved again and then again. Then be able to multiply this by three. Know the basic conversion of fractions and decimals (as well as inverse).

Year 6 Fractions				
Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.	Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.	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. $^1/_3 \div 2 = {}^1/_6$).
Know relationship between fractions, decimals and percentages. Be able to manipulate between each stage as to use whichever the child feels most confident.	Understand the concept of equivalent fraction starting with ½ and 2/4. Use pictures, decimals and percentages. Identify common denominators. Common denominator will stay the same. Only add or subtract numerator (The actual real life piece you have).	Multiplying a proper fraction by a proper fraction will end up with a smaller number. Use arrays to show how;  1/7 = yellow ¼ = red So ¼ x 1/7 = 1/28 = orange.	Understand the process pictorially. Know conversions between fractions and decimals. So 1 and 3/4 multiplied by 2 can be shown pictorially and manipulated.  With decimals also represented so 2 lots of 1 and 2 lots of 0.75.	Show in as many different ways both pictorially and through real life experiences. In a division a denominator is actually multiplied by the whole number.

Year 6 Fractions				
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.	Use written division methods in cases where the answer has up to two decimal places.			
Not moving decimal point or adding zeros. This will confuse when multiplying decimals later in education. Move up and down the columns. Children know the column names	Children understand that $\frac{1}{2}$ is actually dividing by 2. 1/3 is dividing by 3. When using remainders, they can still be divided therefore giving a decimal answer.			