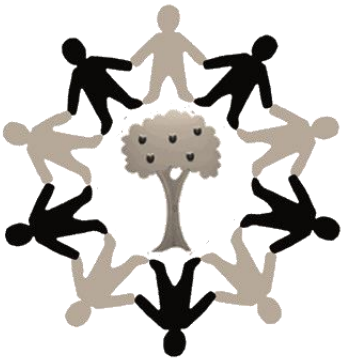

Maths Targets

Number and Place Value

Year 1 expectation	Year 2 expectation
I can count to and across 100, forwards and backwards, beginning from 0 or 1, or from any given number **I can count in multiples of twos, five and tens** **I can count, read and write numbers to 100 in numerals** I can read & write numbers from 1 to 20 in numerals and words **When given a number, I can identify one more and one less** **I can recognise the place value of each digit in a two-digit number** I can identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more then, less than (fewer), most and least **I can recognise odd and even numbers to 20.** **I know my number bonds to 10.**	**I can count in steps of 2, 3, 5 and 10 from any given number** **I can find 10 more or less than any 2 digit number and 100 more than any 3 digit number** **I can read and write numbers up to 100 in numerals and words** **I can count in multiples of 2, 5 and 3 from 0 and in 10s from any number, forward and backward** **I can recognise the value of the hundreds digit and any 2 digit number** I can compare and order numbers to at least 100 using < and > I can identify, represent and estimate numbers using different representations including the number line I can round 3 digit numbers to the nearest 10, 100 and 1000 I can read Roman numbers to 12 **I recognise odd and even numbers to 100.** **I know my number bonds to 20.**

Calculations

Year 1 expectation	Year 2 expectation
I can use a number line to add and subtract by counting on or back or by finding the difference. **I can add and subtract 1-digit and 2-digit numbers to 20, including zero** I can read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs **I can represent and use number bonds and related subtraction facts within 20** I can solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = – 9	**I can add and subtract numbers mentally, including:** • **a two-digit number and ones** • **a two-digit number and tens** • **adding three one-digit numbers** **I can add and subtract numbers with 2 digits, using a written method** I can make all related number facts (e.g. 6+8=14, 8+6=14, 14-6=8, 14-8=6) from one statement I can solve one step problems in context, deciding which operations and methods to use and why
I can use concrete objects, pictorial objects and arrays to calculate x and ÷ statements for the 2, 5 and 10 x tables I can solve one-step problems involving multiplication and division using the above.	**I can recall multiplication and division facts for the 2, 5 and 10 x table** **I can calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs**

	I can mentally calculate TU x U and TU ÷ U using my times table facts (2, 5 and 10) I can show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot I can record my calculations in a written form using mathematical symbols and images e.g. arrays. I can solve problems involving multiplication and division using materials, arrays and repeated addition.
Fractions	
Year 1 expectation	**Year 2 expectation**
I can recognise, find and name a half as one of two equal parts of an object, shape or quantity I can recognise, find and name a quarter as one of four equal parts of an object, shape or quantity **I know my doubles and halves to 20.**	**I can recognise, find, name and write fractions 1/3, ¼, 2/4 and ¾ of a length, shape, set of objects or quantity.** **I can write simple fractions e.g. ½ of 6 = 3 and recognise the equivalence of 2/4 and ½.** I know my doubles and halves to 100.
Geometry	
Year 1 expectation	**Year 2 expectation**
I can recognise and name common 2-D shapes including: • **2-D shapes (e.g. rectangles (including squares), circles and triangles** • **3-D shapes (e.g. cuboids (including cubes), pyramids and spheres)** I can describe position, directions and movements, including half, quarter and three- quarter turns I can use positional vocabulary such as left, right, forwards, backwards, behind and between I can tell left from right turns	**I can identify and describe the properties of 2-D shapes, including the number of sides and symmetry in a vertical line** **I can identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces** **I can compare and sort common 2-D and 3-D shapes and everyday objects** I can identify 2-D shapes on the surface of 3-D shapes, for example a circle on a cylinder and a triangle on a pyramid **I can use mathematical vocabulary to describe position, direction and movement.** **I can distinguish between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise), and movement in a straight line** I know the difference between clockwise and anti-clockwise I can order and arrange combinations of mathematical objects in patterns

Measurement

Year 1 expectation	Year 2 expectation
I can compare, describe and solve practical problems for: • Lengths and heights (e.g. long/short, longer/ shorter, tall/ short, double/half) • Mass or weight (e.g. heavy/light, heavier than, lighter than) • Capacity/ volume (full/empty, more than, less than, quarter) • Time (quicker, slower, earlier, later) • I can measure and record the following: • Lengths and heights • Mass/weight • Capacity and volume • Time (hours, minutes, seconds) **I can sequence events in a chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening** **I can recognise and use language relating to dates, including days of the week, weeks, months and years** **I know the days of the week in order** **I can tell the time to the hour and half past the hour and draw the hands on a clock face to show these times** **I can recognise and know the value of different denominations of coins and notes**	**I can choose and use appropriate standard units to estimate and measure length/ height in any direction (m/cm); mass (kg/g);temperature (C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels** I can compare and order lengths, mass, volume/capacity and record the results using <, > and = I can compare and sequence intervals of time **I can tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.** I know the number of minutes in an hour and the number of hours in a day **I know the months of the year in order** **I can recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value** I can find different combinations of coins that equal the same amounts of money **I can solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change**

Statistics

Year 1 expectation	Year 2 expectation
I can use tables to find and store simple information such as a tally and frequency table. I can sort objects into a simple Venn or Carroll diagram I can answer questions from basic information in graphs and tables	**I can interpret and construct simple pictograms, tally charts, block diagrams and simple tables** I can ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity I can ask and answer questions about totalling and comparing categorical data

Number and Place Value

Year 3 expectation	Year 4 expectation
I can count from 0 in multiples of 4, 8, 50 and 100 **I can find 10 or 100 more or less than a given number** **I can read and write numbers up to 1000 in numerals and in words** I can count backwards through 0 using negative numbers **I can recognise the place value of each digit in a three digit number (H, T, U)** **I can compare and order numbers up to 1000 using < and >** I can identify, represent and estimate numbers using different representations e.g. numicon, cubes, hundred squares etc I can round 4 digit numbers to the nearest 10, 100 and 1000 I can compare and order decimal numbers with one decimal place I can read Roman numerals to 50 (I to L) **I recognise odd and even numbers to 1000.** **I know my number bonds to 100.**	**I can count in multiples of 6, 7, 9, 25 and 1000.** I can find 1000 more or less than a given number I can count backwards through 0 using negative numbers in steps of any multiple **I can recognise the place value of each digit in a four-digit number (Th, H, T, U)** **I can compare and order numbers beyond 1000** I can identify, represent and estimate numbers using different representations with larger numbers **I can round any number to the nearest 10, 100 and 1000.** **I can read, write, order and compare decimal numbers with up to two decimal places** I can read Roman numerals to 100 (I to C) and I understand how numbers developed to include 0.

Calculations

Year 3 expectation	Year 4 expectation
I can add and subtract numbers mentally, including: • **a three-digit number and ones** • **a three-digit number and tens** • **a three-digit number and hundreds** I can add and subtract 3 digit numbers using columnar methods I can use inverses in number problems and estimate the answer to a calculation and say whether my answer is likely I can solve more complex one-step problems in contexts, deciding which operations to use and why **I can recall multiplication and division facts for the 3, 4, 6 and 8 x table** **I can write and calculate mathematical statements for multiplication and division using the multiplication facts that they know including TU x U, using mental and then progressing to formal written methods.** I can use my multiplication tables knowledge to calculate (x and ÷) with multiples of ten I can multiply together three numbers less than 10 e.g. 3 x 7 x 8 I can find factors for numbers to 50	**I can add and subtract three 2 digit numbers, or two 3 digit numbers mentally using known number facts** **I can add and subtract numbers up to 4 digits using columnar methods** I can estimate and use inverse operations to check answers to a calculation I can solve addition and subtraction two-step problems in contexts, deciding which operations to use and why **I can recall multiplication and division facts up to 12x12** I can use place value, known and derived facts to multiply and divide mentally, including multiplying and dividing by 0 and 1; dividing by 1; I can multiply together three numbers **I can recognise and use factor pairs and commutativity in mental calculations** **I can multiply two-digit and three-digit numbers by a one-digit number using a formal layout.** I can multiply TU x TU. **I can divide a 3 digit number by a 1** or 2 digit number including remainders. **I can find the effect of dividing a one- or two- digit number by 10 and 100,**

I understand that multiplication is commutative and division is not. **I can multiply and divide a two-digit number by a one-digit number using a formal layout** I can divide a whole number by 10 with a whole number answer I can solve problems, including missing number problems involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects	**identifying the value of the digits in the answer as units, tenths and hundredths** I can scale up quantities in a problem by multiplying and/or adding (e.g. adapting a recipe for 4 people to 12

Fractions

Year 3 expectation	Year 4 expectation
I can recognise and show equivalent fractions with small denominators **I can count up and down in tenths; recognise that tenths arise when dividing an object by 10.** **I can use fractions such as ¼, ¾, 1/5, 1/6, 1/10, for sets of objects** I can add and subtract fractions with the same denominator within a whole I can recognise and write the decimal equivalents of tenths I can write the decimal equivalent for ½ I can solve simple measure and money problems involving fractions and decimals to one d.p.	**I can recognise and show, using diagrams, families of common equivalent fractions** I can count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten I **can solve problems involving increasingly harder fractions to calculate quantities and fractions divide quantities, including non-unit fractions where the answer is a whole number** I can add and subtract fractions with the same denominator I can recognise and write decimal equivalents of any number of tenths or hundredths **I can recognise and write decimal equivalents to ¼, ½, ¾** **I can solve simple measure and money problems involving fractions and decimals to two d.p.**

Geometry

Year 3 expectation	Year 4 expectation
I can draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them **I can identify and describe the properties of 3-D shapes, using accurate mathematical vocabulary** I can recognise angles as a property of shape or a description of a turn **I can identify right angles, recognise that 2 right angles make a half-turn, 3 make three-quarters of a turn and 4 a complete turn; identify whether angles are greater than or less than a right angle** I can identify lines of symmetry in regular 2D shapes I can reflect and draw shapes in a mirror line	**I compare & classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes** I can recognise the nets of 3D shapes and describe their properties, using accurate mathematical vocabulary **I can identify acute and obtuse angles and compare and order angles up to two right angles (180) by size** I can identify lines of symmetry in 2D shapes presented in different orientations **I can complete a simple symmetric figure with respect to a specific line of symmetry** **I can describe positions on a 2D grids as coordinates in the first quadrant** I can describe movements between positions as translations of a given unit to the left/right

I can identify horizontal and vertical lines and pairs of perpendicular and parallel lines I can plot coordinates in the first quadrant I can use directional language to provide route directions I can read specified points as co-ordinates	and up/down **I can plot specified points and draw sides to complete a given polygon**

Measurement

Year 3 expectation	Year 4 expectation
I can measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) **I can measure the perimeter of simple 2-D shapes** **I can estimate and read time with increasing accuracy to the nearest minute** I can record and compare time in terms of seconds, minutes and hours. **I can tell and write the time to the nearest minute from an analogue clock,** including using Roman numerals from I to XII, and 12-hour and 24-hour clocks I can use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight I know the number of seconds in a minute and the number of days in each month, year and leap year I can solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change **I can add and subtract amounts of money to give change, using both £ and p in practical contexts**	**I can convert between different units of measure (e.g. km to m; hr to min)** I can measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres **I can find the area of rectilinear shapes by counting squares** **I can solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days** I can compare duration of events e.g. to calculate the time taken by particular events or tasks **I can read, write and convert time between analogue and digital 12 and 24hr clocks (to the nearest minute)**

Statistics

Year 3 expectation	Year 4 expectation
I can interpret and present data using bar charts, pictograms and tables I can collect discrete data I can solve one-step and two-step questions [for example 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables	**I can interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and line graphs** I can solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs **I can find the mode and calculate the range when describing a data set.**

Number and Place Value

Year 5 expectation	Year 6 expectation
I can read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit. I can count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000 **I can interpret negative numbers in context, count forwards and backwards with positive and negative numbers through 0.** **I can read, write, order and compare numbers with up to 3 d.p** I can recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents **I can round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000** I can round decimals with one decimal place to the nearest whole number **I can round decimals with two d.p. to the nearest whole number and to one d.p.** I can solve problems involving number up to three d.p. I can read Roman numerals to 1,000 (M) and recognise years written in Roman numerals	**I can read, write, order and compare numbers up to 10,000,000 and determine the value of each digit** **I can use negative numbers in context, and calculate intervals across 0** **I can round any whole number to a required degree of accuracy** I can solve number and practical problems that involve all of the above

Calculations

Year 5 expectation	Year 6 expectation
I can add and subtract numbers mentally with increasingly large numbers **I can add and subtract whole numbers with more than 4 digits using formal columnar addition** I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy **I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.** **I can multiply and divide numbers mentally using known facts** **I can divide numbers up to four-digits by a one-digit number using the formal written method of short division and interpret remainders appropriately according to context** **I can identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers** **I can multiply numbers up to 4 digits by a**	**I can perform mental calculations, including with mixed operations and large numbers** **I can use my knowledge of the order of operations to carry out calculations involving the 4 operations** I can use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy **I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.** **I can perform mental calculations, including with mixed operations and large numbers** **I can divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context** **I can multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.**

one or two digit number, using a formal written method. **I can multiply and divide whole numbers and those involving decimals by 10 and 100.** I can solve problems using multiplication and division and a combination of these, including understanding the equals sign I can solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple ratios **I can solve problems using multiplication and division using my knowledge of factors and multiples, squares and cubes** I can tell whether a number up to 100 is a prime number and recall prime numbers up to 19 I know and use the words prime number, prime factors and composite numbers I can recognise and use square numbers and cube numbers and their notation	**I can identify the value of each digit in numbers given to 3 decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to 3 decimal places** I can multiply one-digit numbers with up to 2 decimal places by whole numbers I can use written division methods in cases where the answer has up to 2 decimal places I can solve problems which require answers to be rounded to specified degrees of accuracy **I can identify common factors, common multiples and prime numbers.** I can use my knowledge of the order of operations to carry out calculations involving the 4 operations
Fractions	
Year 5 expectation	**Year 6 expectation**
I can compare and order fractions whose denominators are multiples of the same number **I can identify, name and write equivalent fractions of a given fraction**, represented visually, including tenths and hundredths **I can recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements <1 as mixed numbers e.g. 2/5 + 4/5 = 6/5 = 1 1/5** I can add and subtract fractions with the same denominator and multiplies of the same number I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams **I can read and write decimal numbers as fractions** **I can recognise the percent symbol (%) and understand percent means number of parts per hundred and write percentages as a fraction with a denominator 100 and as a decimal** I can solve problems which require knowing percentage and decimal equivalents of ½, ¼, 1/5, 2/5, 4/5 and those with a denominator of a multiple of 10 or 25.	**I can compare and order fractions, including fractions >1** **I can use common factors to simplify fractions; use common multiples to express fractions in the same denomination** **I can add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions** I can multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, ¼ × ½ = 1/8] I can associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction e.g. 3/8 I can recall and use equivalences between simple fractions, decimals and percentages, including in different contexts I can divide proper fractions by whole numbers [for example, 1/3 ÷ 2 = 1/6]

Ratio and Proportion

Year 5 expectation	Year 6 expectation
	I can solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts **I can solve problems involving the calculation of percentages [for example, of measures,** **and such as 15% of 360]** and the use of percentages for comparison I can solve problems involving similar shapes where the scale factor is known/ can be found I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.

Geometry

Year 5 expectation	Year 6 expectation
I can use the properties of rectangles to deduce related facts and find missing lengths and angles **I can identify 3D shapes, including cubes and cuboids, from 2D representations** I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles **I know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles** **I can draw given angles and measure them in degrees (o)** **I can identify:** • **angles at a point and one whole turn (total 360 degrees)** • **angles at a point on a straight line and ½ turn (total 180 degrees)** • **other multiples of 90 degrees** I can identify, describe and represent the position of a shape following a reflection or translation, including the appropriate language, and know that the shape has not changed.	I can draw 2-D shapes using given dimensions and angles I can recognise, describe and build simple 3-D shapes, including making nets **I can compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons** **I can illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius** **I can recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles** **I can describe positions on the full coordinate grid (all 4 quadrants)** I can draw and translate simple shapes on the coordinate plane, and reflect them in the axes

Measurement

Year 5 expectation	Year 6 expectation
I can convert between different units of metric measure (e.g. km and m; cm and m; cm and mm; g and kg; l and ml) I can understand and use equivalences between metric units and common imperial units such as inches, pounds and pints I can estimate volume (e.g. using 1 cm3 clocks to build cubes and cuboids) and capacity (e.g. using water) **I can measure and calculate the perimeter of composite rectilinear shapes in cm and m** **I can calculate and compare the area of squares and rectangles including using standard unis cm2 and m2 and estimate the area of irregular shapes** I can solve problems involving converting between units of time	**I can use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to 3 decimal places** **I can solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate** I can convert between miles and kilometres I can recognise when it is possible to use formulae for area and volume of shapes I can calculate the area of parallelograms and triangles I can recognise that shapes with the same areas can have different perimeters and vice versa **I can calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units [for example, mm^3 and km^3]**

Statistics

Year 5 expectation	Year 6 expectation
I can solve comparison, sum and difference problems using information presented in line graphs **I can complete, read and interpret information in tables, including time tables** I can find the median and compare it to the mode.	I can interpret and construct pie charts and **line graphs and use these to solve problems** **I can calculate and interpret the mean as an average**

Algebra

Year 5 expectation	Year 6 expectation
	I can use simple formulae **I can generate and describe linear number sequences** **I can express missing number problems algebraically** I can find pairs of numbers that satisfy an equation with two unknowns I can enumerate possibilities of combinations of two variables.