

# Peters Hill Primary School

LONG TERM PLANNING DOCUMENT AND KEY ASSESSMENT FRAMEWORK  
YEARS 1-6

## Whole School Maths Overviews

Mathematics – Year 1	
Place Value	I can count to and across 100, forwards and backwards, from any given number.
	I can identify and represent numbers using objects and pictorial presentations, including the number line.
	I can identify one more/one less from a given number.
	I can read and write numbers from 1 to 100 in numerals.
	I can read and write numbers from 1 to 20 in words and numerals.
Addition	I know my number bonds to 20.
	I can solve missing number problems such as $7 = ? + 3$
	I can solve one-step problems that involve addition, using practical resources and pictures.
	I can add one digit and two digit numbers up to 20, including zero.
Subtraction	I can solve missing number problems such as $7 = ? - 9$
	I can use related subtraction facts to 20.
	I can solve one step problems that involve subtraction, counting back and on a structured numberline.
	I can solve one step problems that involve subtraction, using practical resources and pictures.
	I can take away one digit and two digit numbers up to 20, including zero.
Multiplication	I can solve one step problems involving multiplications using practical resources, pictures and arrays with support.
	I can count in 2s, 5s and 10s.
Division	I can solve one step problems involving division by grouping practical resources and using pictures.
	I can solve one step problems involving division by sharing practical resources and using pictures.
Fractions	I can recognise, find and name a quarter of an object, shape or quantity.
	I can recognise, find and name a half of an object, shape or quantity.
Problem Solving	I can solve practical problems in the context of measure e.g. length, weight, capacity and time.
	I can solve multiplication and division 1 step word problems using concrete apparatus (2, 5 and 10 x tables only).
	I can solve addition and subtraction 1 step word problems using concrete apparatus.
Measures	I can recognise and know the value of different denominations of coins and notes.
	I can measure and begin to record lengths/heights, weight/mass and capacity.
Time	I can tell the time to half past the hour and draw the hands on a clock face to show these times.
	I can tell the time to the hour and draw the hands on a clock face to show these times.
	I can recognise and use language relating to dates including days of the week, weeks, months and years.
	I can sequence events in chronological order using before, after, today, tomorrow etc.
Shape	I can recognise and name common 3-D shapes (cuboids, cubes, pyramids, spheres).
	I can recognise and name common 2D shapes (rectangles, circles, squares, triangles).
Position	I can describe position, direction and movement including whole, half, quarter and three quarter turns.

## Mathematics – Year 2

Place Value	I can count in twos from any number including crossing boundaries into hundreds.
	I can identify, represent and estimate numbers in different ways, including the number line.
	I can recognise the place value of each digit in a 2 digit number (tens, ones).
	I can read and write numbers to 100 in numerals and words.
	I can identify odd and even numbers up to 20.
	I can use place value and number facts to solve problems.
	I can compare and order numbers from 0 up to 100 using > < and = signs.
	I can count in tens from any number including crossing boundaries into hundreds.
	I can estimate (an addition calculation) and round two digit numbers to the nearest 10.
Times Tables	I can recall and use multiplication and division facts for 2, 5 and 10 times tables.
Addition	I can use known number facts to work out related number facts to 100 e.g. I know $5+4=9$ , so I know $50+40=90$ .
	I can add 10 to any 2 digit number mentally.
	I can show that addition can be done in any order.
	I can add tens and ones using a 100 square or an unstructured number line.
	I can recognise and use inverse relationships to check my answer and solve missing number problems.
	I can solve problems with addition using practical resources, pictures, mental and written strategies including numbers, quantities and measures.
	I can add 2 two digit numbers using an unstructured number line or in columns (crossing a tens boundary).
	I know my addition facts to 20 fluently.
Subtraction	I know my subtraction facts to 20 fluently.
	I can use known number facts to work out related number facts to 100 e.g. $8-3=5$ so I know that $80-30=50$ .
	I can subtract 10 from any number mentally.
	I can show that subtraction cannot be done in any order.
	I can take away tens and ones, counting back on a 100 square or an unstructured number line.
	I can recognise and use inverse relationships to check my answer and solve missing number problems.
	I can solve problems with subtraction using practical resources, pictures, mental and written strategies including numbers, quantities and measures.
	I can take away 2 two digit numbers using an unstructured number line or in columns (crossing a tens boundary).
Multiplication	I can recall and use multiplication facts for 2, 5 and 10 times tables.
	I can solve problems involving multiplication, using materials, arrays, repeated addition, mental methods, and multiplication facts, including problems in contexts.
	I know that multiplication can be done in any order.
	I can calculate mathematical statements and write them using the multiplication (x) and equals (=) signs.
Division	I can solve problems involving division, using materials, arrays, repeated addition, mental methods, and division facts, including problems in contexts.
	I can recall and use division facts for 2, 5 and 10.
	I can show that division of two numbers cannot be done in any order.
	I can calculate mathematical statements and write them using the division and equals signs.
Fractions	I can count in halves and quarters up to 10 recognising that fractions are numbers between a whole number.
	I can recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ .
	I can 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.
Problem Solving	I can solve simple money problems involving addition and finding the change (£ or pence).
	I can use place value and number facts to solve problems.
	I can solve simple word problems involving addition and subtraction with numbers up to 50.
	I can solve missing number problems for addition and subtraction with numbers up to 20.
Measures	I can find different combination of coins that equal the same amounts.

	I can combine amounts to make a particular value e.g. make 3p using 2p and 1p.
	I can recognise and use symbols for pounds and pence.
	I can compare and order measures and record using < > and =
	I can choose appropriate units of measure to estimate length/height, weight/mass, capacity and temperature.
	I can measure using appropriate equipment e.g. ruler, weighing scales, measuring jugs, thermometers.
Time	I can tell and write the time to five minute intervals and draw the hands on a clock face to show these times.
	I can tell and write the time to quarter past/to the hour and draw the hands on a clock face to show these times.
	I can compare and sequence intervals of time.
	I know how many minutes in an hour and how many hours in a day.
Statistics	I can ask and answer questions about totalling and comparing data.
	I can ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.
	I can construct simple pictograms, tally charts, block diagrams and simple tables.
Shape	I can compare and sort common 2D and 3D shapes and everyday objects.
	I can identify 2D shapes on the surface of 3D shapes e.g. a circle on a cylinder.
	I can identify and describe the properties of 3D shapes, including the number of edges.
	I can identify and describe the properties of 3D shapes, including the number of vertices.
	I can identify and describe the properties of 3D shapes, including the number of faces.
	I can identify and describe the properties of 2D shapes, including the number of sides and symmetry in a vertical line.
Position	I can recognise a rotation as a turn and I can make quarter turns, half turns, three quarter turns and whole turn including clockwise and anti-clockwise.
	I can use mathematical vocabulary to describe position, direction and movement including movement in a straight line.
	I can order and arrange combinations of mathematical objects in patterns and sequences.

## Mathematics Year 3

Place Value	I can solve number problems using my knowledge of place value.
	I can count in tens and hundreds and can add or subtract 10 or 100 from any given number up to 1000.
	I can compare and order numbers up to 1000.
	I can read and write numbers up to 1000 in numerals and words.
	I can understand the value of each digit in a 3 digit number.
Times Tables	I can recall and use the multiplication and division facts for the 8 times table recognising its relationship to the 4 times table.
	I can recall and use the multiplication and division facts for the 4 times table.
	I can recall and use the multiplication and division facts for the 3 times table.
Addition	I can estimate the answer to an addition calculation or use the inverse to check it is correct.
	I can add 2 digit numbers and 3 digit numbers using expanded column addition.
	I can add mentally a 3 digit number and hundreds.
	I can add mentally a 3 digit number and tens.
	I can add mentally a 3 digit number and ones/units.
	I can add 2 digit numbers and 3 digit numbers using column addition.
Subtraction	I can subtract 2 and 3 digit numbers using column subtraction with decomposition.
	I can subtract 2 and 3 digit numbers using column subtraction without decomposition.
	I can estimate the answer to a subtraction calculation or use the inverse to check it is correct.
	I can partition a number and subtract (2 and 3 digit numbers).
	I can subtract mentally 3 digit numbers and hundreds.
	I can subtract mentally 3 digit numbers and tens.
	I can subtract mentally 3 digit numbers and ones/units.
Multiplication	I can partition a number into 10's and ones to multiply (distributive law).
	I can use related facts to multiply multiples of 10 e.g. $2 \times 3 = 6$ $2 \times 30 = 60$
	I can explore the effect of partitioning a number to multiply (distributive law) e.g. exploring $7 \times 8$ by splitting 7 into 2+5 then calculating $2 \times 8 + 5 \times 8$
	I can write multiplication statements using tables that I know.
Division	I can divide 2 digit numbers by another number using the tables I know.
Fractions	I can work out fractions of amounts for common fractions e.g. $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{3}$ , $\frac{1}{5}$ of a set of objects.
	I can add and subtract fractions with the same denominator within a whole e.g. $\frac{2}{5} + \frac{1}{5} = \frac{3}{5}$ .
	I can compare and order fractions with the same denominator e.g. say which is bigger $\frac{2}{5}$ or $\frac{4}{5}$ ?
	I can recognise non-unit fractions of a shape.
	I can recognise unit fractions of a shape.
	I can recognise and show using pictures, simple equivalent fractions e.g. $\frac{1}{2} = \frac{2}{4} = \frac{3}{6}$ , $\frac{1}{3} = \frac{2}{6}$ .
	I can compare and order unit fractions with the support of fraction boards and number lines.
	I can work out simple non-unit fractions of amounts e.g. $\frac{3}{4}$ of a set of objects.
Decimals	I can divide a 1 digit number by ten and write it as a decimal (using a place value board) e.g. $\frac{1}{10} = 0.1$
	I can count in tenths and understand a tenth as part of a whole divided into equal parts.
	I can show that tenths arise from dividing an object into 10 equal parts.
Problem Solving	I can solve simple 1 step word problems involving multiplication and division.
	I can solve 1 step word problems involving addition and subtraction (inc numbers beyond 100).
	I can solve simple scaling problems (e.g twice as far) and simple correspondence problems (e.g. share 4 cakes equally between 8 children).
	I can solve missing number problems for multiplication and division with numbers up to 100 using my knowledge of number facts.
	I can solve money problems involving addition and finding the change.
Property of number	I can recognise patterns in some multiplication tables (2, 5, 10, 4 and 8).

Measures	I can read measures in mixed units e.g. 1m and 23 cm and can convert simple whole units e.g. 5m = 500cm.
	I can compare, add and subtract measures.
	I can read measuring instruments with a wider range of unit measurements e.g. cm, mm, m, g, kg, l, ml.
Time	I can use the vocabulary of time and know the number of seconds in a minute, days in each month, year and leap year.
	I understand and use the vocabulary such as o'clock, am, pm, noon and midnight.
	I can read the time on a digital clock (12 and 24 hour).
	I can read an analogue clock with Roman numerals.
	I can calculate and compare time durations.
	I can read and write the time to the nearest minute on an analogue clock.
	I can read time in seconds, minutes and hours and can compare lengths of time e.g. which is longer.
Perimeter and Area	I can find the perimeter of simple 2D shapes by counting the sides of squares and measuring (whole cm).
Statistics	I can solve simple 2 step problems using the information presented in charts and graphs e.g. how many more/fewer? (scales 2, 5, 10).
	I can solve one step problems using the information presented in charts and graphs e.g. how many with a scale of 2, 5 and 10.
	I can present data in charts and graphs including using a scale of 2, 5 and 10.
Shape	I can draw 2D shapes and describe them using my knowledge of properties e.g. sides, lines and angles.
	I can recognise right angles in 2D shapes and say if an angle is greater or less than a right angle (bigger, smaller, $<$ , $>$ )
	I can identify right angles and describe how right angles can make up $\frac{1}{4}$ , $\frac{1}{2}$ , $\frac{3}{4}$ and a whole turn.
	I can identify horizontal and vertical lines and pairs of perpendicular and parallel lines.
	I can recognise a 3D shape in different orientations.
	I can make 3D shapes using modelling materials and name and describe their properties.

## Mathematics Year 4

Place Value	I can compare and order numbers beyond 1000.
	I can understand the value of each digit in a 4 digit number.
	I can count backwards through zero to include negative numbers.
	I can round any whole number to the nearest 10, 100 or 1000.
	I can say 1000 more or less than any given number.
Times Tables	I can recall and use the multiplication and division facts for all tables up to 12 x 12.
	I can recall and use the multiplication and division facts for the 10 times table.
	I can recall and use the multiplication and division facts for the 9 times table recognising their relationship to the 3 and 6 times tables.
	I can recall and use the multiplication and division facts for the 6 times table recognising their relationship to the 3 times table.
Addition	I can add money with decimal places using the formal column addition.
	I can check an answer using the inverse or estimate.
	I can add 3 and 4 digit numbers using formal column addition.
Subtraction	I can check an answer using the inverse or estimation.
	I can recognise when to use column subtraction and when to use a number line.
	I can subtract 3 and 4 digit numbers using formal column subtraction.
	I can subtract money including decimals using a number line e.g. finding the change from £500.
Multiplication	I can multiply 3 numbers, combining them in different ways and using my knowledge of number facts to make it easier e.g. $2 \times 6 \times 5 = 10 \times 6$ derived from $(2 \times 5) \times 6$
	I can use a formal vertical method to multiply TO and HTO by 0.
	I can use an expanded vertical method to multiply TO and HTO by 0.
	I can use related facts to multiply multiples of 10 and 100 e.g. $2 \times 3 = 6$ , $2 \times 30 = 60$ , $2 \times 300 = 600$ .
Division	I can divide 3 digit numbers using formal written methods.
	I can divide 2 digit numbers by increasingly efficient written methods and use related multiplication facts.
Fractions	I can recognise and work out non-unit fractions of shapes, measures and sets of objects e.g. $\frac{3}{4}$ of a metre, or $\frac{2}{5}$ of a bar of chocolate made of 20 pieces.
	I can recognise and work out unit fractions of shapes, measures and sets of objects e.g. $\frac{1}{8}$ of a bar of chocolate made of 40 pieces.
	I can recognise and show, using diagrams, equivalent fractions in a family of fractions.
	I can add and subtract fractions where the denominator is the same beyond a whole.
Decimals	I can compare and order decimals with the same number of decimal places up to 2 decimal places.
	I can find the effect of dividing one and two digit numbers by 100 and identify the value of the digits in the answer as ones/units, tenths and hundredths.
	I can find the effect of dividing one and two digit numbers by 10 and identify the value of the digits in the answer as ones/units, tenths and hundredths.
	I can recognise and write the decimal equivalent of tenths, hundredths and common fractions ( $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{3}{4}$ ) in a variety of contexts e.g. money and measures.
	I can count up and down in hundredths and recognise a hundredth as a whole divided in to 100 equal parts and as 10 parts of a tenth.
	I can round a decimal with one decimal place to a whole number.
Problem Solving	I can solve scaling problems (e.g. eight times as high) and correspondence problems e.g. 3 starters, 3 mains, 3 desserts how many different meal options?).
	I can solve two step word problems involving multiplication and division.
	I can solve two step word problems involving addition and subtraction deciding which operations to use and when.
	I can check the answers to a problem using an estimate or the inverse.
Number	I can recognise factor pairs of a number.
	I can recognise multiples of single digit numbers.
Measures	I can estimate, compare and calculate measures in a variety of contexts.
	I can convert between units of measure using multiplication (larger to smaller) e.g. from km to m and m to cm.
	I can convert between units of measure with the support of measuring instruments and where appropriate record with decimal notation.
	I can use both £ and p in context and recognise equivalence e.g. 306p = £3.06

Time	I can solve problems involving converting hours to minutes, minutes to seconds, years to months or weeks to days.
	I can solve problems involving calculating lengths of time.
	I can read, write and convert time between analogue and digital 24 hour clocks.
	I can read, write and convert time between analogue and digital 12 hour clocks.
Perimeter and Area	I can calculate the area of rectangles using multiplication.
	I can find the area of rectangles by counting squares.
	I can measure and calculate the perimeter of rectangles including squares.
Statistics	I can solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
	I can present and interpret continuous data in the form of time (line) graphs recognising that it is recording a change over time.
	I can present discrete data using appropriate graphical methods e.g. choose own scale and choose type of chart or graph.
	I can interpret data presented in a range of graphical representations with a greater range of scales e.g. Venn or Carroll diagrams.
Shape	I can identify lines of symmetry in 2D shapes presented in different orientations.
	I can complete symmetrical shapes and patterns with respect to a specific line of symmetry.
	I can name, describe and sort a variety of quadrilaterals based on their properties.
	I can name, describe and sort a variety of triangles based on their properties.
	I can compare and order angles.
	I can identify and name acute and obtuse angles.
Position	I can describe the movement of a shape on a grid using left/right, up/down and understand it is a translation.
	I can use co-ordinates to plot points on a grid (1st quarter) and draw sides to complete a polygon.
	I can describe positions on a 2D grid as co-ordinates.



## Mathematics Year 5

Place Value	I can interpret negative numbers in context.
	I can count forwards and backwards in steps of powers of 10 for any given number up to 1 000 000.
	I can round and number up to 1 000 000 to the nearest 10, 1000, 1000 and 10,000.
	I can read, write, order and compare numbers to 1 000 000 (1 million) and determine the value of each digit.
Times Tables	I can recall quickly all the division facts for tables up to 12 x 12 and can use them confidently in larger calculations.
	I can recall quickly all the multiplication facts for tables up to 12 x 12 and can use them confidently in larger calculations.
Addition	I can add a mix of whole numbers and decimals with different numbers of decimal places using column addition.
	I can add a mix of whole numbers and decimals with the same number of decimal places using column addition.
	I can use rounding to estimate and check answers to calculations.
	I can add 4 digit and larger numbers in different contexts using formal column addition.
Subtraction	I can subtract a mix of whole numbers and decimals with different numbers of decimal places using column addition.
	I can subtract a mix of whole numbers and decimals with the same number of decimal places using column subtraction.
	I can use rounding to check answers to calculations.
	I can subtract 4/5/6 digit numbers using formal column subtraction.
Multiplication	I can multiply TO x TO using long multiplication.
	I can multiply TO x TO using an expanded written strategy.
	I can multiply TO x TO using diagrams, arrays and grids.
	I can use related facts to multiply multiples of 10 and 100 e.g. $2 \times 3 = 6$ , $20 \times 30 = 600$ .
	I can use a formal vertical method to multiply THHTO, HTO and numbers with up to 2 decimal places (e.g. money) by 0.
	I can use a formal vertical method to multiply THHTO and HTO by 0.
Division	I can divide by 4 digit and 3 digit numbers by one digit using short division.
	I can begin to represent a remainder as a fraction or decimal e.g. when dividing the remainder of 1 by 4, it=0.25
Fractions	I can multiply proper fractions and mixed numbers by a whole number using diagrams and concrete apparatus.
	I can add and subtract fractions with the same denominators including recognising and converting improper fractions to mixed numbers.
	I can recognise and convert improper fractions to mixed numbers.
	I can add and subtract fractions with denominators in the same fraction family.
	I can compare and order fractions where denominators are in the same fraction family.
Decimals	I can compare and order whole numbers and decimals with up to 2 decimal places.
	I can read, write, order and compare numbers that have a mixture of 1, 2 or 3 decimal places.
	I can recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.
	I can round decimals with 2 decimal places to the nearest whole number and to one decimal place.
Percentage and Ratio	I can write a % as a fraction and a decimal.
	I can recognise and understand % as part of 100.
Problem Solving	I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.
	I can independently select an effective strategy (formal written method) for calculations and problem solving.
	I can investigate a problem involving place value and properties of number, and present my investigation in a clear and organised way.
	I can use all 4 operations to solve equivalence statements e.g. $5x? = 18+12$
	I can solve multi step problems involving a combination of any of the 4 operations, including involving measures.
	I can solve problems involving multiplication and division including scaling by simple fractions.

	I can solve division problems interpreting remainders in context and adjusting the answer appropriately.
	I can solve addition and subtraction multi step problems in context, deciding which operations to use and why.
Number	I can recognise cubed numbers and use the correct notation.
	I can recognise squared numbers and use the correct notation.
	I can recognise and describe linear number sequences including those involving fractions and decimals and find the term to term rule e.g. add half.
	I can work out if a number up to 100 is a prime number and have quick recall of all the prime numbers to 19.
	I know and use the vocabulary of prime numbers, prime factor and composite (non-prime) numbers.
	I can identify common factors of two numbers.
	I can identify multiples and factors including finding all factor pairs of a number.
Measures.	I can estimate volume and capacity and explore these concepts using practical materials.
	I can convert between different units of measure using my understanding of x and divide by 10, 100 and 1000.
	I can understand and use approximate equivalences between units and common imperial units (inches, pounds, pints).
Time	I can solve problems which involve converting between units of time e.g. expressing the answer as days and weeks.
	I can solve problems involving time including reading simple timetables.
Perimeter and Area	I can find unknown lengths on rectilinear shapes using my understanding of perimeter and area.
	I can calculate and compare the area of rectangles using cm <sup>2</sup> and m <sup>2</sup> including from scale drawings e.g. km to m.
	I can measure and calculate the area of shapes that need to be divided into rectangles (composite rectilinear shapes) in cm <sup>2</sup> and m <sup>2</sup> .
	I can measure and calculate the perimeter of shapes that need to be divided into rectangles (composite rectilinear shapes) in cm and m.
	I can estimate the area of irregular shapes.
Statistics	I can decide which representations of data are most appropriate and explain why.
	I can complete, read and interpret information presented in tables and other graphical representations.
	I can solve comparison and difference problems using information presented in line graphs.
Shape	I can draw and measure given angles in degrees.
	I can identify and compare acute, obtuse and reflex angles.
	I can calculate missing angles at a point (360 degrees).
	I can calculate missing angles on a straight line (180 degrees) or within a right angle (90 degrees).
	I can identify 3D shapes from 2D representations.
	I can identify regular and irregular shapes using my knowledge of length of sides and angles.
Position	I can identify, describe and draw the position of a shape on a grid after a translation.
	I can identify, describe and draw the position of a shape on a grid after a reflection on a line parallel to the axis.

## Mathematics Year 6

Place Value	I can use negative numbers in context and calculate intervals across zero.
	I can round any whole number to a required degree of accuracy.
	I can read, write order and compare numbers up to 10 000 000 and determine the value of each digit.
Times Tables	I can continue to recall quickly all the multiplication and division facts up to 12x12 and can use them confidently in larger calculations.
Multiplication	I can use long multiplication to multiply THTO or HTO bt TO.
	I can use related facts to multiply multiples of 10 and 100 e.g. $2 \times 3 = 6$ , $200 \times 30 = 6000$ .
	I can multiply numbers with up to 2 decimal places by a whole number.
Division	I can divide numbers up to 4 digits by a 2 digit whole number using long division.
	I can express a quotient as a fraction, decimal or rounded according to context.
Fractions	I can divide proper fractions by a whole number e.g. $\frac{1}{3}$ divided by 2 = $\frac{1}{6}$ .
	I can multiply simple pairs of proper fractions and write the answer in its simplest form e.g. $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$ .
	I can add and subtract fractions and mixed numbers with different denominators using the idea of equivalence.
	I can compare and order any set of fractions, proper or improper, or mixed numbers including those with different denominators.
	I can use common multiples to express fractions in the same denomination.
	I can simplify fractions using common factors.
Decimals	Round answers with a specific degree of accuracy.
	I can calculate more complex decimal equivalents such as $\frac{3}{8} = 0.375$ using my understanding of the equivalence between fractions and decimals.
	I can associate a fractions with division and calculate decimal equivalents of common fractions such as halves, quarters and fifths.
	I can multiply and divide numbers by 10, 100 and 1000 giving answers up to 3 decimal places.
Percentage + Ratio	I can divide a quantity in a given ratio (recognising the proportion as a fraction of the whole).
	I can identify that a problem can be written as a ratio and solve problems using this relationship.
	I can solve problems involving similar shapes where the scale factor is known or can be found.
	I can solve % problems in a variety of contexts such as comparing % (e.g. best buys).
	I can recall and use equivalence between fractions, decimals and % to solve problems e.g. 10% of £500 or 50% of the team.
Problem Solving	I can round and estimate as a means of predicting and checking the order of magnitude of my answers to a decimal calculation.
	I consistently check the reasonableness of my answer in all calculations e.g. using estimates.
	I can solve addition and subtraction multi step problems in context, with increasingly large numbers, deciding which operations to use and why.
	I can solve multi step word problems and investigations involving all 4 operations from a large range of contexts.
	I can solve multi step word problems using division in context.
	I can solve multi step word problems using multiplication in context.
Number	I can find pairs of numbers that satisfy an equation with two unknowns.
	I can express missing number problems/patterns algebraically.
	I can solve a variety of number problems using formulae and algebraic equations.
	I can apply an algebraic formula.
	I can generate and describe linear number sequences.

	I can explore the order of operations using brackets.
	I can identify the common factors, common multiples and prime numbers, with increasingly larger numbers.
	I have a quick recall of all square numbers to 12 squared.
Measures.	I can convert between miles and km.
	I can recognise when it is possible to use formulae to calculate volume.
	I can calculate, estimate and compare column of cubes and cuboids using standard units e.g. cm <sup>3</sup> .
	I can solve problems involving the calculation and conversion of units of measure using decimal notation up to three decimal places.
	I can use, read, write and convert between standard units of measure using decimal notation up to 3 decimal places.
Perimeter and Area	I can investigate relationships between area and perimeter e.g. shapes with the same area can have different perimeters and vice versa.
	I can recognise when it is possible to use formulae to calculate area.
	I can calculate the area of parallelograms.
	I can calculate the area of triangles.
Statistics	I can calculate the mean as an average and understand when it is appropriate to find the mean of a set of data.
	I can solve problems using the data from line graphs (including conversion graphs) and pie charts including ones I have constructed myself.
	I can construct a pie chart using my knowledge of fractions and angles.
	I can interpret a pie chart.
Shape	I can recognise vertically opposite angles and use this to calculate missing angles.
	I can illustrate and name parts of a circle including radius, diameter and circumference and know that diameter is twice the radius.
	I can compare and classify geometric shapes based on their size and properties and can find unknown angles in any triangle, quadrilateral or regular polygon.
	I can recognise, describe and build simple 3D shapes including making nets.
	I can accurately draw 2D shapes using given angles and dimensions.
Position	I can label the axes of a grid in all 4 quadrants and describe a position on the grid.
	I can predict missing coordinates using the properties of a shape.
	I can draw and translate simple shapes on a 4 quadrant grid.
	I can reflect simple shapes in the axes.

## Reading – Key Texts Overview

Year Group	Autumn	Spring	Summer
<b>1</b>	Knuffle Bunny. Not a Stick. Billy's Bucket. Harvey Slumfenburger. The Usborne book of big machines. The Gingerbread Man. Down behind the Dustbin.	Bring the Rain to Kapiti Plain. Handa's Hen. We all went on Safari. Don't let the Pigeon stay up late. Don't let the Pigeon drive the bus. The Works. Sensational. The House that Jack built. Anancy and Mr Dry-Bone. White Owl. Romeo and Juliet.	3 Little Pigs. Goldilocks. Superworm. Supertato. Poem maker, Word shaker. The Works. Snow white in New York. Hairy Tales and Nursery Crimes. Non Fiction texts about Britain.
<b>2</b>	Tatty Ratty. Dogger. Katie in London. The True Story of the Three Little Pigs. Tell me a dragon.	The Enormous Crocodile. Just so stories (Tinga Tinga Tales). We're going on a lion hunt. Lila and the Secret of Rain. Meerkat Mail. Romeo and Juliet.	Charlie's Bag. Where the wild things are. The Dark. Man on the Moon. How to catch a star. The Way back Home. Rickety Train Ride Poem.
<b>3</b>	Stone Age Boy. The Tunnel. Voices in the Park. Gorilla.	The Great Kapok Tree. The Shaman's Apprentice. A River Ran Wild. Romeo and Juliet.	This Morning I met a Whale.
<b>4</b>	Danny Champion of the World. David Copperfield. Treasure Island.	Tiger Tiger. Romeo and Juliet.	Lost and Found. The Firework Maker's Daughter.
<b>5</b>	Carrie's War. Wreck of the Zanzibar. Butterfly Lion. Kensuke's Kingdom.	Holes. Romeo and Juliet. Friend or Foe.	Friend or Foe.  Wind in the Willows.
<b>6</b>	Rooftoppers. Skellig. Midsummer Nights Dream.	The Lion, The Witch and the Wardrobe. The Runner. Romeo and Juliet.	Goodnight Mr Tom. Journey to Jo'burg. The Billionaire Boy.

# Whole School Reading Overview

Reading Year 1	
Decode	I can read the common tricky words.
	I can use picture clues to help in reading simple texts.
	I can read words of more than one syllable that contain all the graphemes - e.g. desktop.
	I can read familiar endings to words (-s, -es, -ing, -ed, -er, -est).
	I can use phonic knowledge to blend sounds together to read words, including long phonemes.
Comprehend	I can recognise the difference between fiction and non-fiction.
	I can answer straight forward retrieval questions about a story.
	I can identify the main events or key points in a text.
Detect	I can recognise why a character is feeling a certain way.
	I can make simple predictions about the characters.
	I can express opinions about main events and characters in a story.
Language	I can recognise adjectives and adverbs.
	I can recognise obvious story language e.g. Once upon a time, big bad wolf.
	I can discuss what new words mean.
	I can recognise and join in with predictable phrases.
Respond	I can participate in discussions about what is read to me, taking turns and listening to what others say.
	I can show that I am interested in what I have read, or have listened to, across a wide range of texts - e.g. stories, poems and non-fiction.
Reader	I can recite a simple poem by heart.
	I can re-tell simple, familiar stories - e.g. fairy tales.

## Reading Year 2

Decode	I can read further tricky words, spotting the differences in spellings and sounds.
	I can read accurately by blending the sounds in words that contain all the graphemes.
	I can read words containing common suffixes.
	I can self-correct when I have read a sentence incorrectly.
	I can read familiar words quickly, without needing to sound them out or blend.
Comprehend	I can find the answers to retrieval questions in non-fiction, stories and poems.
	I can decide how useful a non-fiction text is for purpose.
	I can begin to notice how non-fiction texts are structured in different ways.
	I can re-tell a story, referring to most of the key events and characters.
Read	I can make simple inferences on the basis of what is being said and done.
	I can recognise key themes and ideas within a text.
	I can make predictions based on my own experiences and other books.
Language	I can identify and comment on vocabulary and literary features of specific genres and non-fiction texts e.g. fairy tales.
	I can discuss the meaning of new words, linking new meanings to known words.
	I can identify how vocabulary choice affects meaning e.g. Crept lets you know that he was trying to be quiet.
	I can discuss my favourite words and phrases.
Respond	I can participate in discussions about books, poems and other works that are read to me and those that I can read for myself.
	I understand why a writer has written a text e.g. She wants you to know how to make a kite.
	I can make choices about which texts to read, based on prior reading experience.
Read	I can relate what I read to my own experiences.
	I am aware that books are set in different times and places.

Reading Year 3	
Decode	I can read out loud confidently, understanding how to use a range of punctuation.
	I can use knowledge of root words, suffixes and prefixes to read and understand new words.
	I can use the context of the sentence to help me to read unfamiliar words.
Comprehend	I can use alphabetically ordered texts to find information.
	I can identify the features of different text types.
	I can use a range of organisational features to locate information, such as labels, diagrams and charts.
Detect	I can justify inferences with evidence from the text.
	I can justify predictions with evidence from the text.
	I can empathise with a character.
Language	I can discuss words and phrases that capture the reader's interest and imagination.
	I can comment on the choice of language to create moods and build tension e.g. Crept to be quite and also not to be caught.
Respond	I understand what the writer might be thinking.
	I can begin to identify and comment on different points of view in a text.
	I can evaluate specific texts with reference to text types.
Read	I can start to make simple connections between books by the same author e.g. Dick King Smith often writes about animals.
	I can start to recognise some features of the text that relate it to its historical setting or its social or cultural background.
	I can retell some of the stories that I am familiar with orally.
Reading Year 4	
Decode	I can recognise and understand an even greater variety of suffixes and prefixes including mis-, dis-, -ous, -sion.
	I can read, on sight, all the words from the year 3/4 spelling list.
	I can recognise where words are an exception to the rule.
	I can explain the meaning of words in context.
Comprehend	I can compare, contrast and evaluate different fiction and non-fiction texts.
	I can identify features of different fiction genres.
	I can locate information using skimming, scanning and text marking.
Detect	I can infer and deduce characters' feelings, thoughts and motives from their actions, dialogue and description.
	I can make predictions with evidence from text and with knowledge of wider reading.
Language	I can recognise the use and effect of different structures, such as patterned language in text.
	I know how language and structure are used to create atmosphere in a story.
	I can find and comment on examples of how authors express different moods, feelings and attitudes.
Respond	I can identify main ideas from more than one paragraph and can summarise these.
	I can identify themes and conventions/features in a wide range of fiction and non-fiction texts e.g. key messages.
	I understand how the author wants the reader to respond.
Read	I can make comparisons and contrast between the books of a writer or different writers e.g Michael Morpurgo.
	I can use my knowledge of wider reading to make connections about where and when books are set.
	I can recognise some different forms of poetry.



## Reading Year 5

Decode	I can read aloud with the appropriate intonation, tone and volume so that the meaning is clear for the reader.
	I can maintain fluency and accuracy when reading complex sentences with subordinate clauses.
	I can respond to more sophisticated punctuation e.g. ( ) ; : -
Comprehend	I can identify genre-specific phrases.
	I can discuss complex narrative plots e.g. identifying problems or complications and how they are resolved.
	I can summarise the main ideas drawn from more than one paragraph.
Detect	I can recognise different points of view e.g. characters in fiction and the author in non-fiction.
	I can discuss moods, feelings and attitudes using inference.
	I can draw information from different parts of the text to infer meaning.
Language	I can use language features of a range of non-fiction text types and can use them to support understanding.
	I can identify and comment on expressive, figurative and descriptive language to create effect in poetry and prose.
	I can identify and describe the styles of individual writers and poets.
Respond	I can recognise ways in which writers present issues and points of view in fiction and non-fiction texts e.g. he has only mentioned the bad points about air travel!
	I can talk about the author's techniques for describing characters, settings and actions.
	I can show awareness of the writer's viewpoint in my responses across a range of texts.
	I can recommend books that I have read to my peers, giving reasons for my choices.
Read	I can participate in discussions about books, building my own and others' ideas and challenging views courteously.
	I understand that texts reflect the time and culture in which they were written e.g. Hound of the Baskervilles would have been scary for Victorian readers.

## Reading Year 6

Decode	I can use connectives as signposts to indicate a change of tone e.g. however.
	I can cope with different features of language such as abbreviations, colloquialisms, dialect and specialist vocabulary.
	I can use my knowledge of morphology and etymology to understand the meaning of new words e.g. words derived from roots other languages, parliament.
Comprehend	I can recognise text types that contain features of more than one text type e.g. persuasive letter.
	I can distinguish between statements of fact and opinion.
	I can find the answers to questions in more complex non-fiction, stories and poems.
	I can retrieve, record and present information from factual research, considering what is known already.
Detect	I can use PEE (Point, Evidence, Explain) to support predictions and inferences.
	I can use detailed knowledge of text types to make reasoned predictions.
	I can infer and comment on implicit points of view.
Language	I can comment on and explain the writer's use of a language feature e.g. the rhythm and rhyme pattern make it mimetic like the rhythm of a train.
	I can compare and contrast the styles of individual writers and poets providing examples e.g. use of language.
	I know how style and vocabulary are linked to the purpose of the text - 'Obviously common sense tells us' in a persuasive text.
Respond	I can identify techniques used by writers to present issues and points of view in more complex texts.
	I can analyse and comment critically on the impact of the author's techniques.
	I can identify and describe the key characteristics about a writer's or a poet's style.
	I can identify and discuss themes and conventions in and across a wide range of writing.
Read	I am beginning to evaluate texts by comparing how different writers treat the same information.
	I understand that texts reflect the time and culture in which they were written e.g. Dickens wanted people to feel bad about the way the poor were treated.
	I can identify different character types across a range of texts e.g. anti-hero etc.

# Whole School Writing Overview

Year 1 Writing	
Spelling	I can write what is read aloud to me, including tricky words and words that I have to sound out.
	I use the rules for adding -s and -es.
	I can add the suffixes -ed, -ing, -er, -est to root words.
	I can spell the days of the week.
	I can spell words using the 40+ phonemes that I know.
	I can spell most of the 100 high frequency words.
	I can use the prefix 'un'.
Organised	I can rehearse out loud before writing my ideas down.
	My writing can be read without mediating.
	I can use a simple structure in my writing e.g. beginning, middle and end or instructions in the right order.
	I can write more than one sentence about an idea.
Purpose	I can convey basic information and ideas through appropriate word choices.
	I can share what I have written with an adult.
Word	I can use some basic descriptive language - colour, size, simple emotions.
	I can make some appropriate word choices from word banks, class lists and sentence openers.
Grammar	I can read my writing out loud clearly and check if it makes sense.
	I can use capital letters for names of people, places, days of the week and personal pronoun - I.
	I can begin to punctuate sentences with exclamation marks and question marks.
	I can begin to punctuate sentences, using a capital letter and a full stop.
	I can join words and clauses using the conjunction 'and'.
Handwriting	I can begin to form lower case letters in the correct direction, starting and finishing in the right place.
	I can form capital letters.
	I can hold a pencil comfortably and correctly when sitting at a table.
	I can form digits 0-9, starting and finishing in the right place.

Year 2 Writing	
Spelling	I can spell the simple homophones/near homophones e.g there, their, they're.
	I can spell most of the common tricky/exception words.
	I can use the possessive apostrophe for a singular person - the girl's book.
	I can spell 10 words with contractions - it's, can't, won't, they're etc.
	I can write what is read aloud to me, including tricky words, words that have to sound out and use the correct basic punctuation.
	I can add suffixes to spell longer words -eg. -ment, -ful, -less, -ly.
Organised	I can use connectives and prepositions that signal time e.g. then, after, before, in, on.
	I can use the conjunctions -or and -but to link my ideas.
	I can use a simple structure in my writing e.g. beginning, middle, end, or instructions in the correct order.
	The organisation reflects the purpose of the writing e.g. newspaper features.
	I can think about and plan what I am going to write before writing it.
Purpose	I can think about the different styles needed for different types of writing.
	I am beginning to use different types of language across different types of writing e.g. story language, non-fiction.
	I can identify whether a sentence is a command, statement, exclamation or question.
	I know who my writing is for (intended audience).
Word	I can use interesting adjectives to describe people, objects and setting.
	I can use interesting adverbs to describe actions.
	I can show evidence of using simple similes - It was as yellow as the sun.
Grammar	I can use the present and past tenses correctly.
	I can use commas in a list.
	I can use question marks and exclamation marks correctly.
	I can consistently use full stops and capital letters correctly in my sentences.
	I can use apostrophes for contracted forms and the possessive (singular) form - the girl's book.
Handwriting	I am beginning to join letters in my writing.
	I can write capital and lower case letters of the correct size and orientation.
	I can use spacing between words that reflects the size of the letters.
	I can form lower case letters of the correct size, relative to one another.
	My writing can be read without mediating.

## Year 3 Writing

Spelling	I can spell words ending in -tion, -sion, -cian, -ssion.
	I can use the prefixes dis-, mis-, in- and im-
	I can spell the next 22 sets of homophones/near homophones e.g. accept/except.
	I can use the first two or three letters of a word to check the spelling in a dictionary.
Organised	I can make additions, revisions and improvements to my writing.
	I can begin to use an appropriate opening and ending.
	I can use simple connectives (e.g. Also, as well, because) to link ideas logically.
	The organisation reflects the purpose of the writing - a newspaper report has a headline, a by-line, introduction and recount of events.
	I can begin to use paragraphing in narrative writing - e.g. for a new location in a story.
	I can group similar information together in paragraphs in non-fiction writing.
Purpose	Some evidence of viewpoint is established.
	I can include relevant, imaginative detail - e.g. direct speech, description of a setting and feelings, humour, surprise or suspense.
	I am beginning to understand how to write for different audiences and different purposes.
Word	My vocabulary is interesting and provides some clarity for the reader e.g. stumble instead of walk.
	I can use appropriate words to support the text type - e.g. use imperative verbs in instruction texts.
	I can modify nouns by one or more precise adjectives - a loud wailing sound.
	I can use interesting adverbs to describe actions.
Grammar	I can write and punctuate complex sentences using a wider range of prepositions and conjunctions - e.g. although, if.
	I can use a range of different sentence starters.
	I can proof read for errors.
	I can edit my writing to check that it makes sense.
Handwriting	I can lay my work out appropriately on the page - e.g. start at the top and begin each line next to the margin.
	I can write the date and title and underline both for every piece of writing.
	I only use capital letters when appropriate.

## Year 4 Writing

Spelling	I can use the possessive apostrophe correctly in regular and irregular plurals - e.g. children's shoes and girls' shoes.
	I can use the suffixes -ly, -ation, -ous.
	I can spell the next 22 sets of homophones/near homophones - e.g. accept/except.
	I can write correctly spelt and punctuated sentences as dictated by my teacher.
	I can spell all of the Year 3 and 4 word list.
Organised	I can use paragraphs to organise my stories into an introduction, build up, conflict and resolution.
	In non-fiction, I can write a clear introduction, followed by logical points, drawing to a defined conclusion.
	I can plan how to structure my writing to meet the purpose.
Purpose	I can use some of the 'Tricks of the trade' for a given style to ensure that the style of writing is evident.
	I can evaluate how effective my writing is, by referring to the features of a given text type and make necessary improvements.
	In narrative, my writing creates settings, insights into characters and develops the plot through blending, rather than telling the reader.
Word	I can use adventurous and varied vocabulary to engage the reader.
	I can use a choice of pronouns or nouns to avoid repetition.
	I can use a thesaurus to improve my choice of words and to expand my vocabulary.
Grammar	I can use commas after fronted adverbials.
	I can use and punctuate direct speech with inverted commas.
	I can write in standard English forms for verb inflections - e.g. we were instead of we was.
	I can use a range of sentence structures - simple, compound and complex.
Handwriting	I can use diagonal and horizontal strokes that are needed to join letters.

## Year 5 Writing

Spelling	I know and use the 'I before e' rule following a c.
	I can spell words with the endings -cious and -tious.
	I can spell words with silent letters.
	I can spell words with the letter string -ough.
Organised	In narrative, I can shape a story using paragraphs to show shifts in time, place and action.
	I can use connectives, within a paragraph, to link the sentences - e.g. in addition, finally, therefore.
	Within paragraphs, I can sustain and develop my ideas around a topic sentence.
Purpose	I can blend dialogue with action and description to convey character and move the story forward.
	In my writing, the setting is used to create mood.
	I can use devices to engage the reader - e.g. repetition for effect, rhetorical question, etc.
	I can write in a given style successfully.
	I can manipulate sentence structures for effect, to suit the purpose.
Word	I can use a thesaurus independently to choose words for deliberate effect.
	My vocabulary choices are more thoughtful and enhance meaning.
	I can use expanded noun phrases to convey relevant information concisely.
Grammar	I can use a range of sentence structures - short, compound and complex.
	I can use commas more accurately to separate clauses - e.g. subordinate, embedded and relative.
	I can use colons and semi colons when writing lists.
	I can ensure the consistent and correct use of tense throughout a piece of writing.
	I can edit for spelling, punctuation and grammar errors and suggest improvements to my own and others' writing.
Handwriting	I prepare myself and my work area to enable the required level of presentation.

## Year 6 Writing

Spelling	I can spell all of the year 5 and 6 word list.
	I can spell words with the endings -cial and -tial.
	I can spell words with the endings -ible and -able.
	I can regularly and independently make use of a dictionary to check the spelling and meaning of words.
Organised	I can link my ending with a range of references to the start of my writing.
	I can create my own plan appropriate to the audience and purpose.
	I can make links between paragraphs in non-fiction writing - e.g. a topic sentence links to the linking sentence from the previous paragraph.
Purpose	I can use the setting and weather as a 'sympathetic background' to the characters situations - e.g. thunderstorms for the dangerous parts with the sun coming out when all is well.
	My writing is well paced.
	My writing is well constructed and shows a secure grasp of the chosen genre.
Word	I can make assertive use of the characteristic language and of the chose text type.
	When editing, I recognise how changing the word choice can enhance the meaning of the writing.
	I can use vocabulary that is varied, imaginative and appropriate, including use of technical and specific words.
	I can recognise vocabulary that is appropriate for formal speeches and writing.
Grammar	I can use brackets, dashes or commas to indicate parenthesis.
	I can choose passive verbs, when appropriate, to affect the presentation of information in a sentence.
	I can recognise sentence structures that are appropriate for formal speech and writing - e.g. If I were.
	I can use semi colons, colons or dashes to mark boundaries between independent clauses.
Handwriting	The direction (or slant) of my handwriting is consistent across a piece of work.
	My handwriting is clear and legible every time I write.
	I can choose the writing implement that is best suited for a task.
	I can maintain holding a pencil/pen correctly.



# Science

## What the National Curriculum requires in science at Y1

### Working scientifically

During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- Asking simple questions and recognising that they can be answered in different ways
- Observing closely, using simple equipment
- Performing simple tests
- Identifying and classifying
- Using their observations and ideas to suggest answers to questions
- Gathering and recording data to help in answering questions.

### Year 1 Biology

Plants

Pupils should be taught to:

- Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees
- Identify and describe the basic structure of a variety of common flowering plants, including trees.

Animals, including humans

Pupils should be taught to:

- Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals
- Identify and name a variety of common animals that are carnivores, herbivores and omnivores
- describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)
- Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.

### Year 1 Chemistry

Everyday materials

Pupils should be taught to:

- Distinguish between an object and the material from which it is made
- Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock
- Describe the simple physical properties of a variety of everyday materials
- Compare and group together a variety of everyday materials on the basis of their simple physical properties.

### Year 1 Physics

Seasonal changes

Pupils should be taught to:

- Observe changes across the four seasons
- Observe and describe weather associated with the seasons and how day length varies.

**Being a Scientist – Year 1**

Working scientifically (Years 1 and 2)	Biology	Chemistry	Physics
<ul style="list-style-type: none"> <li>• I can ask simple scientific questions.</li> <li>• I can use simple equipment to make observations.</li> <li>• I can carry out simple tests.</li> <li>• I can identify and classify things.</li> <li>• I can suggest what I have found out.</li> <li>• I can use simple data to answer questions</li> </ul>	<p>Plants</p> <ul style="list-style-type: none"> <li>• I can name a variety of common wild and garden plants.</li> <li>• I can name the petals, stem, leaf and root of a plant.</li> <li>• I can name the roots, trunk, branches and leaves of a tree.</li> </ul> <p>Animals, including humans</p> <ul style="list-style-type: none"> <li>• I can name a variety of animals including fish, amphibians, reptiles, birds and mammals.</li> <li>• I can classify and name animals by what they eat (carnivore, herbivore and omnivore).</li> <li>• I can sort animals into categories (including fish, amphibians, reptiles, birds and mammals).</li> <li>• I can sort living and non-living things.</li> <li>• I can name the parts of the human body that I can see.</li> <li>• I can link the correct part of the human body to each sense.</li> </ul>	<p>Everyday materials</p> <ul style="list-style-type: none"> <li>• I can distinguish between an object and the material it is made from.</li> <li>• I can explain the materials that an object is made from.</li> <li>• I can name wood, plastic, glass, metal, water and rock.</li> <li>• I can describe the properties of everyday materials.</li> <li>• I can group objects based on the materials they are made from.</li> </ul>	<p>Seasonal changes</p> <ul style="list-style-type: none"> <li>• I can observe and comment on changes in the seasons.</li> <li>• I can name the seasons and suggest the type of weather in each season.</li> </ul>
Emerging	Secure	Exceeding	

# Science

## What the National Curriculum requires in science at Y2

### Working scientifically

During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- Asking simple questions and recognising that they can be answered in different ways
- Observing closely, using simple equipment
- Performing simple tests
- Identifying and classifying
- Using their observations and ideas to suggest answers to questions
- Gathering and recording data to help in answering questions.

### Year 1 Biology

Living things and their habitats

Pupils should be taught to:

- Explore and compare the differences between things that are living, dead, and things that have never been alive
- Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other
- Identify and name a variety of plants and animals in their habitats, including micro-habitats
- Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.

Plants

Pupils should be taught to:

- Observe and describe how seeds and bulbs grow into mature plants
- Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

Animals, including humans

Pupils should be taught to:

- Notice that animals, including humans, have offspring which grow into adults
- Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)
- Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.

### Year 1 Chemistry

Uses of everyday materials

Pupils should be taught to:

- Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
- Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

**Being a Scientist – Year 2**

Working scientifically (Years 1 and 2)	Biology	Chemistry	Physics
<p>Working scientifically (Y1 and Y2)</p> <ul style="list-style-type: none"> <li>• I can ask simple scientific questions.</li> <li>• I can use simple equipment to make observations.</li> <li>• I can carry out simple tests.</li> <li>• I can identify and classify things.</li> <li>• I can suggest what I have found out.</li> <li>• I can use simple data to answer questions</li> </ul>	<p>Biology</p> <p>Living things and their habitats</p> <ul style="list-style-type: none"> <li>• I can identify things that are living, dead and never lived.</li> <li>• I can describe how a specific habitat provides for the basic needs of things living there (plants and animals).</li> <li>• I can identify and name plants and animals in a range of habitats.</li> <li>• I can match living things to their habitat.</li> <li>• I can describe how animals find their food.</li> <li>• I can name some different sources of food for animals.</li> <li>• I can explain a simple food chain.</li> </ul> <p>Plants</p> <ul style="list-style-type: none"> <li>• I can describe how seeds and bulbs grow into plants.</li> <li>• I can describe what plants need in order to grow and stay healthy (water, light &amp; suitable temperature).</li> </ul> <p>Animals, including humans</p> <ul style="list-style-type: none"> <li>• I can explain the basic stages in a life cycle for animals, including humans.</li> <li>• I can describe what animals and humans need to survive.</li> <li>• I can describe why exercise, a balanced diet and good hygiene are important for humans.</li> </ul>	<p>Chemistry</p> <p>Uses of everyday materials</p> <ul style="list-style-type: none"> <li>• I can identify and name a range of materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard.</li> <li>• I can suggest why a material might or might not be used for a specific job.</li> <li>• I can explore how shapes can be changed by squashing, bending, twisting and stretching.</li> </ul>	<p>Physics</p> <p>No content</p>
Emerging	Secure	Exceeding	

## Science - What the National Curriculum requires in science at Y3

### Working scientifically

During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- Asking relevant questions and using different types of scientific enquiries to answer them
- Setting up simple practical enquiries, comparative and fair tests
- Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- Identifying differences, similarities or changes related to simple scientific ideas and processes
- Using straightforward scientific evidence to answer questions or to support their findings.

### Biology - Plants

Pupils should be taught to:

- Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers
- Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant
- Investigate the way in which water is transported within plants
- Explore the part that flowers play in the life cycle

### Animals, including humans

- Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat
- Identify that humans and some other animals have skeletons and muscles for support, protection and movement

### Chemistry - Rocks

- Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties
- Describe in simple terms how fossils are formed when things that have lived are trapped within rock
- Recognise that soils are made from rocks and organic matter.

### Physics - Light

Pupils should be taught to:

- Recognise that they need light in order to see things and that dark is the absence of light
- Notice that light is reflected from surfaces
- Recognise that light from the sun can be dangerous and that there are ways to protect their eyes
- Recognise that shadows are formed when the light from a light source is blocked by a solid object
- Find patterns in the way that the size of shadows change.

### Forces and magnets

Pupils should be taught to:

- Compare how things move on different surfaces
- Notice that some forces need contact between two objects, but magnetic forces can act at a distance
- Observe how magnets attract or repel each other and attract some materials and not others
- Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials
- Describe magnets as having two poles
- Predict whether two magnets will attract or repel each other, depending on which poles are facing

**Being a Scientist – Year 3**

Working scientifically (Years 3 and 4)	Biology	Chemistry	Physics
<p>Working scientifically (Y3 and Y4)</p> <ul style="list-style-type: none"> <li>• I can ask relevant scientific questions.</li> <li>• I can use observations and knowledge to answer scientific questions.</li> <li>• I can set up a simple enquiry to explore a scientific question.</li> <li>• I can set up a test to compare two things.</li> <li>• I can set up a fair test and explain why it is fair.</li> <li>• I can make careful and accurate observations, including the use of standard units.</li> <li>• I can use equipment, including thermometers and data loggers to make measurements.</li> <li>• I can gather, record, classify and present data in different ways to answer scientific questions.</li> <li>• I can use diagrams, keys, bar charts and tables; using scientific language.</li> <li>• I can use findings to report in different ways, including oral and written explanations, presentation.</li> <li>• I can draw conclusions and suggest improvements.</li> <li>• I can make a prediction with a reason.</li> <li>• I can identify differences, similarities and changes related to an enquiry.</li> </ul>	<p>Biology</p> <p>Plants</p> <ul style="list-style-type: none"> <li>• I can describe the function of different parts of flowering plants and trees.</li> <li>• I can explore and describe the needs of different plants for survival.</li> <li>• I can explore and describe how water is transported within plants.</li> <li>• I can describe the plant life cycle, especially the importance of flowers.</li> </ul> <p>Animals, including humans</p> <ul style="list-style-type: none"> <li>• I can explain the importance of a nutritious, balanced diet.</li> <li>• I can explain how nutrients, water and oxygen are transported within animals and humans.</li> <li>• I can describe and explain the skeletal system of a human.</li> <li>• I can describe and explain the muscular system of a human.</li> <li>• I can describe the purpose of the skeleton in humans and animals.</li> </ul>	<p>Chemistry</p> <p>Rocks</p> <ul style="list-style-type: none"> <li>• I can compare and group rocks based on their appearance and physical properties, giving a reason.</li> <li>• I can describe how fossils are formed.</li> <li>• I can describe how soil is made.</li> <li>• I can describe and explain the difference between sedimentary and igneous rock.</li> </ul>	<p>Physics</p> <p>Light</p> <ul style="list-style-type: none"> <li>• I can describe what dark is (the absence of light).</li> <li>• I can explain that light is needed in order to see.</li> <li>• I can explain that light is reflected from a surface.</li> <li>• I can explain and demonstrate how a shadow is formed.</li> <li>• I can explore shadow size and explain.</li> <li>• I can explain the danger of direct sunlight and describe how to keep protected.</li> </ul> <p>Forces and magnets</p> <ul style="list-style-type: none"> <li>• I can explore and describe how objects move on different surfaces.</li> <li>• I can explain how some forces require contact and some do not, giving examples.</li> <li>• I can explore and explain how objects attract and repel in relation to objects and other magnets.</li> <li>• I can predict whether objects will be magnetic and carry out an enquiry to test this out.</li> <li>• I can describe how magnets work.</li> <li>• I can predict whether magnets will attract or repel and give a reason.</li> </ul>
Emerging	Secure	Exceeding	

## Science - What the National Curriculum requires in science at Y4

### Working scientifically

During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- Asking relevant questions and using different types of scientific enquiries to answer them
- Setting up simple practical enquiries, comparative and fair tests
- Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- Identifying differences, similarities or changes related to simple scientific ideas and processes
- Using straightforward scientific evidence to answer questions or to support their findings.

### Biology

Living things and their habitats

Pupils should be taught to:

- Recognise that living things can be grouped in a variety of ways
- Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment
- Recognise that environments can change and that this can sometimes pose dangers to living things.

Animals, including humans

Pupils should be taught to:

- Describe the simple functions of the basic parts of the digestive system in humans
- Identify the different types of teeth in humans and their simple functions
- Construct and interpret a variety of food chains, identifying producers, predators and prey.

### Chemistry

States of matter

Pupils should be taught to:

- Compare and group materials together, according to whether they are solids, liquids or gases
- Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)
- Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature

### Physics

Sound

Pupils should be taught to:

- Identify how sounds are made, associating some of them with something vibrating
- Recognise that vibrations from sounds travel through a medium to the ear
- Find patterns between the pitch of a sound and features of the object that produced it
- Find patterns between the volume of a sound and the strength of the vibrations that produced it
- Recognise that sounds get fainter as the distance from the sound source increases.

### Electricity

Pupils should be taught to:

- Identify common appliances that run on electricity
- Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers
- Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery
- Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit
- Recognise some common conductors and insulators, and associate metals with being good conductors.

**Being a Scientist – Year 4**

Working scientifically (Years 3 and 4)		Biology	Chemistry	Physics
Working scientifically (Y3 and Y4) <ul style="list-style-type: none"><li>• I can ask relevant scientific questions.</li><li>• I can use observations and knowledge to answer scientific questions.</li><li>• I can set up a simple enquiry to explore a scientific question.</li><li>• I can set up a test to compare two things.</li><li>• I can set up a fair test and explain why it is fair.</li><li>• I can make careful and accurate observations, including the use of standard units.</li><li>• I can use equipment, including thermometers and data loggers to make measurements.</li><li>• I can gather, record, classify and present data in different ways to answer scientific questions.</li><li>• I can use diagrams, keys, bar charts and tables; using scientific language.</li><li>• I can use findings to report in different ways, including oral and written explanations, presentation.</li><li>• I can draw conclusions and suggest improvements.</li><li>• I can make a prediction with a reason.</li><li>• I can identify differences, similarities and changes related to an enquiry.</li></ul>		Biology Living things and their habitats <ul style="list-style-type: none"><li>• I can group living things in different ways.</li><li>• I can use classification keys to group, identify and name living things.</li><li>• I can create classification keys to group, identify and name living things (for others to use).</li><li>• I can describe how changes to an environment could endanger living things.</li></ul> Animals, including humans <ul style="list-style-type: none"><li>• I can identify and name the parts of the human digestive system.</li><li>• I can describe the functions of the organs in the human digestive system.</li><li>• I can identify and describe the different types of teeth in humans.</li><li>• I can describe the functions of different human teeth.</li><li>• I can use food chains to identify producers, predators and prey.</li><li>• I can construct food chains to identify producers, predators and prey</li></ul>	Chemistry States of matter <ul style="list-style-type: none"><li>• I can group materials based on their state of matter (solid, liquid, gas).</li><li>• I can describe how some materials can change state.</li><li>• I can explore how materials change state.</li><li>• I can measure the temperature at which materials change state.</li><li>• I can describe the water cycle.</li><li>• I can explain the part played by evaporation and condensation in the water cycle.</li></ul>	Physics Sound <ul style="list-style-type: none"><li>• I can describe how sound is made.</li><li>• I can explain how sound travels from a source to our ears.</li><li>• I can explain the place of vibration in hearing.</li><li>• I can explore the correlation between pitch and the object producing a sound.</li><li>• I can explore the correlation between the volume of a sound and the strength of the vibrations that produced it.</li><li>• I can describe what happens to a sound as it travels away from its source.</li></ul> Electricity <ul style="list-style-type: none"><li>• I can identify and name appliances that require electricity to function.</li><li>• I can construct a series circuit.</li><li>• I can identify and name the components in a series circuit (including cells, wires, bulbs, switches and buzzers).</li><li>• I can draw a circuit diagram.</li><li>• I can predict and test whether a lamp will light within a circuit.</li><li>• I can describe the function of a switch in a circuit.</li><li>• I can describe the difference between a conductor and insulators; giving examples of each.</li></ul>
Emerging		Secure		Exceeding



## Science - What the National Curriculum requires in science at Y5

### Working scientifically

During years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- Using test results to make predictions to set up further comparative and fair tests
- Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
- Identifying scientific evidence that has been used to support or refute ideas or arguments.

### Biology

#### Living things and their habitats

Pupils should be taught to:

- Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird
- Describe the life process of reproduction in some plants and animals.

#### Animals, including humans

Pupils should be taught to:

- Describe the changes as humans develop to old age.

### Physics

#### Earth and space

Pupils should be taught to:

- Describe the movement of the Earth, and other planets, relative to the Sun in the solar system
- Describe the movement of the Moon relative to the Earth
- Describe the Sun, Earth and Moon as approximately spherical bodies
- Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky

### Forces

Pupils should be taught to:

- Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
- Identify the effects of air resistance, water resistance and friction, that act between moving surfaces
- Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.

### Chemistry

#### Properties and changes of materials

Pupils should be taught to:

- Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets
- Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution
- Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating
- Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic
- Demonstrate that dissolving, mixing and changes of state are reversible changes
- Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda

## Being a Scientist – Year 5

Being a Scientist – Year 5						
Working scientifically (Years 5 and 6)	Biology	Chemistry	Physics			
<p>Working scientifically (Y5 and Y6)</p> <ul style="list-style-type: none"><li>• I can plan different types of scientific enquiry.</li><li>• I can control variables in an enquiry.</li><li>• I can measure accurate and precisely using a range of equipment.</li><li>• I can record data and results using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</li><li>• I can use the outcome of test results to make predictions and set up a further comparative fair test.</li><li>• I can report findings from enquiries in a range of ways.</li><li>• I can explain a conclusion from an enquiry.</li><li>• I can explain causal relationships in an enquiry.</li><li>• I can relate the outcome from an enquiry to scientific knowledge in order to state whether evidence supports or refutes an argument or theory.</li><li>• Read, spell and pronounce scientific vocabulary accurately</li></ul>	<p>Biology</p> <p>Living things and their habitats</p> <ul style="list-style-type: none"><li>• I can describe the life cycle of different living things, e.g. mammal, amphibian, insect bird.</li><li>• I can describe the differences between different life cycles.</li><li>• I can describe the process of reproduction in plants.</li><li>• I can describe the process of reproduction in animals.</li></ul> <p>Animals, including humans</p> <ul style="list-style-type: none"><li>• I can create a timeline to indicate stages of growth in humans.</li></ul>	<p>Chemistry</p> <p>Properties and changes of materials</p> <ul style="list-style-type: none"><li>• I can compare and group materials based on their properties (e.g. hardness, solubility, transparency, conductivity, [electrical &amp; thermal], and response to magnets).</li><li>• I can describe how a material dissolves to form a solution; explaining the process of dissolving.</li><li>• I can describe and show how to recover a substance from a solution.</li><li>• I can describe how some materials can be separated.</li><li>• I can demonstrate how materials can be separated (e.g. through filtering, sieving and evaporating).</li><li>• I know and can demonstrate that some changes are reversible and some are not.</li><li>• I can explain how some changes result in the formation of a new material and that this is usually irreversible.</li><li>• I can discuss reversible and irreversible changes.</li><li>• I can give evidenced reasons why materials should be used for specific purposes.</li></ul>	<p>Physics</p> <p>Earth and space</p> <ul style="list-style-type: none"><li>• I can describe and explain the movement of the Earth and other planets relative to the Sun.</li><li>• I can describe and explain the movement of the Moon relative to the Earth.</li><li>• I can explain and demonstrate how night and day are created.</li><li>• I can describe the Sun, Earth and Moon (using the term spherical).</li></ul> <p>Forces</p> <ul style="list-style-type: none"><li>• I can explain what gravity is and its impact on our lives.</li><li>• I can identify and explain the effect of air resistance.</li><li>• I can identify and explain the effect of water resistance.</li><li>• I can identify and explain the effect of friction.</li><li>• I can explain how levers, pulleys and gears allow a smaller force to have a greater effect.</li></ul>			
				Emerging	Secure	Exceeding

## Science - What the National Curriculum requires in science at Y6

### Working scientifically

During years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- Using test results to make predictions to set up further comparative and fair tests
- Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
- Identifying scientific evidence that has been used to support or refute ideas or arguments.

### Biology

#### Living things and their habitats

- Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals
- Give reasons for classifying plants and animals based on specific characteristics.

#### Animals, including humans

- Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood
- Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function
- Describe the ways in which nutrients and water are transported within animals, including humans.

#### Evolution and inheritance

- Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago
- Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents
- Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

### Physics

#### Light

Pupils should be taught to:

- Recognise that light appears to travel in straight lines
- Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye
- Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes
- Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.

#### Electricity

Pupils should be taught to:

- Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit
- Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches
- Use recognised symbols when representing a simple circuit in a diagram.

**Being a Scientist – Year 6**

Working scientifically (Years 5 and 6)	Biology	Chemistry	Physics
<p>Working scientifically (Y5 and Y6)</p> <ul style="list-style-type: none"> <li>• I can plan different types of scientific enquiry.</li> <li>• I can control variables in an enquiry.</li> <li>• I can measure accurate and precisely using a range of equipment.</li> <li>• I can record data and results using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</li> <li>• I can use the outcome of test results to make predictions and set up a further comparative fair test.</li> <li>• I can report findings from enquiries in a range of ways.</li> <li>• I can explain a conclusion from an enquiry.</li> <li>• I can explain causal relationships in an enquiry.</li> <li>• I can relate the outcome from an enquiry to scientific knowledge in order to state whether evidence supports or refutes an argument or theory.</li> <li>• Read, spell and pronounce scientific vocabulary accurately</li> </ul>	<p>Biology</p> <p>Living things and their habitats</p> <ul style="list-style-type: none"> <li>• I can classify living things into broad groups according to observable characteristics and based on similarities &amp; differences.</li> <li>• I can describe how living things have been classified.</li> <li>• I can give reasons for classifying plants and animals in a specific way.</li> </ul> <p>Animals, including humans</p> <ul style="list-style-type: none"> <li>• I can identify and name the main parts of the human circulatory system.</li> <li>• I can describe the function of the heart, blood vessels and blood.</li> <li>• I can discuss the impact of diet, exercise, drugs and life style on health.</li> <li>• I can describe the ways in which nutrients and water are transported in animals, including humans.</li> </ul> <p>Evolution and inheritance</p> <ul style="list-style-type: none"> <li>• I can describe how the earth and living things have changed over time.</li> <li>• I can explain how fossils can be used to find out about the past.</li> <li>• I can explain about reproduction and offspring (recognising that offspring normally vary and are not identical to their parents).</li> <li>• I can explain how animals and plants are adapted to suit their environment.</li> <li>• I can link adaptation over time to evolution.</li> <li>• I can explain evolution.</li> </ul>	<p>Chemistry</p> <p>No content</p>	<p>Physics</p> <p>Light</p> <ul style="list-style-type: none"> <li>• I can explain how light travels.</li> <li>• I can explain and demonstrate how we see objects.</li> <li>• I can explain why shadows have the same shape as the object that casts them.</li> <li>• I can explain how simple optical instruments work, e.g. periscope, telescope, binoculars, mirror, magnifying glass etc.</li> </ul> <p>Electricity</p> <ul style="list-style-type: none"> <li>• I can explain how the number &amp; voltage of cells in a circuit links to the brightness of a lamp or the volume of a buzzer.</li> <li>• I can compare and give reasons for why components work and do not work in a circuit.</li> <li>• I can draw circuit diagrams using correct symbols.</li> </ul>
Emerging	Secure	Exceeding	

## Science – Whole School Overview

Year Group	Autumn	Spring	Summer
<b>1</b>	Who am I? (Animals including humans) Treasure Island (Everyday materials – plants, animals; including humans)	Polar Adventures (Everyday materials, plants animals including humans)	On safari (Everyday materials, plants, animals including humans). Holiday (protecting animals in the environment)
<b>2</b>	Healthy me! (Animals including humans) Materials Monster! (Everyday materials)	Mini Worlds (Animals including humans – plants)	Young Gardeners (Living things and their habitats, plants). Little master chefs (healthy eating)
<b>3</b>	Earth Rocks (Rocks). Food and our Bodies (Animals including humans)	Mirror Mirror (light). How does your garden grow? (Plants)	Opposites attract (Forces and magnets) We are astronauts.
<b>4</b>	What's that sound? (Sound) Living things (Living things and their habitat.	Looking at states (states of matter). Teeth and eating (animals including humans)	Power it up (Electricity)
<b>5</b>	Out of this World (Earth and Space). Material world (Properties and change of materials)	Circle of life (Living things and their habitats). Lets get moving (Forces)	Lets get moving (Forces) Super scientists (scientists in the real world)
<b>6</b>	Classifying Critters (Living things and their habitats) Staying Alive (Animals including humans)	We are evolving (evolution and inheritance) Let it shine (Light)	Electrifying (Electricity)

## History - What the National Curriculum requires in history

### KS1

Pupils should develop an awareness of the past, using common words and phrases relating to the passing of time. They should know where the people and events they study fit within a chronological framework and identify similarities and differences between ways of life in different periods. They should use a wide vocabulary of everyday historical terms. They should ask and answer questions, choosing and using parts of stories and other sources to show that they know and understand key features of events. They should understand some of the ways in which we find out about the past and identify different ways in which it is represented. In planning to ensure the progression described above through teaching about the people, events and changes outlined below, teachers are often introducing pupils to historical periods that they will study more fully at key stages 2 and 3.

Pupils should be taught about:

- changes within living memory. Where appropriate, these should be used to reveal aspects of change in national life
- events beyond living memory that are significant nationally or globally [for example, the Great Fire of London, the first aeroplane flight or events commemorated through festivals or anniversaries]
- the lives of significant individuals in the past who have contributed to national and international achievements. Some should be used to compare aspects of life in different periods [for example, Elizabeth I and Queen Victoria, Christopher Columbus and Neil Armstrong, William Caxton and Tim Berners-Lee, Pieter Bruegel the Elder and LS Lowry, Rosa Parks and Emily Davison, Mary Seacole and/or Florence Nightingale and Edith Cavell]
- significant historical events, people and places in their own locality.

### KS2

Pupils should continue to develop a chronologically secure knowledge and understanding of British, local and world history, establishing clear narratives within and across the periods they study. They should note connections, contrasts and trends over time and develop the appropriate use of historical terms. They should regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance. They should construct informed responses that involve thoughtful selection and organisation of relevant historical information. They should understand how our knowledge of the past is constructed from a range of sources. In planning to ensure the progression described above through teaching the British, local and world history outlined below, teachers should combine overview and depth studies to help pupils understand both the long arc of development and the complexity of specific aspects of the content.

Pupils should be taught about:

- changes in Britain from the Stone Age to the Iron Age
- the Roman Empire and its impact on Britain
- Britain's settlement by Anglo-Saxons and Scots
- the Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor
- a local history study
- a study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066
- the achievements of the earliest civilizations – an overview of where and when the first civilizations appeared and a depth study of one of the following: Ancient Sumer; The Indus Valley; Ancient Egypt; The Shang Dynasty of Ancient China
- Ancient Greece – a study of Greek life and achievements and their influence on the western world
- a non-European society that provides contrasts with British history – one study chosen from: early Islamic civilization, including a study of Baghdad c. AD 900; Mayan civilization c. AD 900; Benin (West Africa) c. AD 900-1300.

Being a Historian Year 1			Year 2			Year 3		
<ul style="list-style-type: none"> <li>• I can use words and phrases like: old, new and a long time ago.</li> <li>• I can recognise that some objects belonged to the past.</li> <li>• I can explain how I have changed since I was born.</li> <li>• I can explain how some people have helped us to have better lives.</li> <li>• I can ask and answer questions about old and new objects.</li> <li>• I can spot old and new things in a picture.</li> <li>• I can explain what an object from the past might have been used for.</li> </ul>			<ul style="list-style-type: none"> <li>• I can use words and phrases like: before, after, past, present, then and now.</li> <li>• I can recount the life of someone famous from Britain who lived in the past. I can explain what they did earlier and what they did later.</li> <li>• I can give examples of things that were different when my grandparents were children.</li> <li>• I can find out things about the past by talking to an older person.</li> <li>• I can answer questions using books and the internet.</li> <li>• I can research the life of a famous person from the past using different sources of evidence.</li> </ul>			<ul style="list-style-type: none"> <li>• I can describe events from the past using dates when things happened.</li> <li>• I can use a timeline within a specific period of history to set out the order that things may have happened.</li> <li>• I can use my mathematical knowledge to work out how long ago events happened.</li> <li>• I can explain some of the times when Britain has been invaded.</li> <li>• I can use research skills to find answers to specific historical questions.</li> <li>• I can research in order to find similarities and differences between two or more periods of history.</li> </ul>		
Emerging	Secure	Exceeding	Emerging	Secure	Exceeding	Emerging	Secure	Exceeding
Year 4			Year 5			Year 6		
<ul style="list-style-type: none"> <li>• I can plot events on a timeline using centuries.</li> <li>• I can use my mathematical skills to round up time differences into centuries and decades.</li> <li>• I can explain how the lives of wealthy people were different from the lives of poorer people.</li> <li>• I can explain how historic items and artefacts can be used to help build up a picture of life in the past.</li> <li>• I can explain how an event from the past has shaped our life today.</li> <li>• I can research two versions of an event and explain how they differ.</li> <li>• I can research what it was like for children in a given period of history and present my findings to an audience.</li> </ul>			<ul style="list-style-type: none"> <li>• I can draw a timeline with different historical periods showing key historical events or lives of significant people.</li> <li>• I can compare two or more historical periods; explaining things which changed and things which stayed the same.</li> <li>• I can explain how Parliament affects decision making in England.</li> <li>• I can explain how our locality has changed over time.</li> <li>• I can test out a hypothesis in order to answer questions.</li> <li>• I can describe how crime and punishment has changed over a period of time.</li> </ul>			<ul style="list-style-type: none"> <li>• I can place features of historical events and people from the past societies and periods in a chronological framework.</li> <li>• I can summarise the main events from a period of history, explaining the order of events and what happened.</li> <li>• I can summarise how Britain has had a major influence on the world.</li> <li>• I can summarise how Britain may have learnt from other countries and civilizations (historically and more recently).</li> <li>• I can identify and explain differences, similarities and changes between different periods of history.</li> <li>• I can identify and explain propaganda.</li> </ul>		
Emerging	Secure	Exceeding	Emerging	Secure	Exceeding	Emerging	Secure	Exceeding

## Whole School History Overview

Year Group	Autumn	Spring	Summer
<b>1</b>	Old and New Toys How we used to live – Local area and Peters Hill What was life like when our grandparents were children?	Mary Anning – Fossil Collector Ernest Shackleton – Arctic Explorer Who are our local heroes?	Seaside holidays in the past Railways in the past Why do we remember the fifth of November?
<b>2</b>	Bonfire Night – Who was Guy Fawkes? How did the first flight change the world?	How has food changed over time?	Journeys and Exploration - Titanic Space – Neil Armstrong Who were the greatest explorers?
<b>3</b>	Childhood in the past Stone age What was new about the new stone age?	Bronze age Iron age How unpleasant were the Bronze and Iron ages?	How much did the ancient Egyptians achieve?
<b>4</b>	Victorians What was important to our local Victorians?	Romans What happened when the Romans came?	Is it better to be a child now than in the past? Comparison between Roman and Victorian childhoods
<b>5</b>	Modern and Ancient Greece Why should we thank the Ancient Greeks?	Anglo Saxons What impact did the Anglo Saxons have?	History of holidays since 1950 Would the Vikings do anything for money?
<b>6</b>	World War 2 USA part in the War	Why should we remember the Maya?	How has communication changed over time?



# Geography - what the National Curriculum requires in geography at KS1

## Locational knowledge

- Name and locate the world's seven continents and five oceans
- Name, locate and identify characteristics of the four countries and capital cities of the United Kingdom and its surrounding seas

## Place knowledge

- Understand geographical similarities and differences through studying the human and physical geography of a small area of the United Kingdom, and of a small area in a contrasting non-European country

## Human and physical geography

- Identify seasonal and daily weather patterns in the United Kingdom and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles
- Use basic geographical vocabulary to refer to:
  - o Key physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather
  - o Key human features, including: city, town, village, factory, farm, house, office, port, harbour and shop

## Geographical skills and fieldwork

- Use world maps, atlases and globes to identify the United Kingdom and its countries, as well as the countries, continents and oceans studied at this key stage
- Use simple compass directions (North, South, East and West) and locational and directional language [for example, near and far; left and right], to describe the location of features and routes on a map
- Use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key
- Use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment.

## KS2

### Locational knowledge

- Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities
- Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and landuse patterns; and understand how some of these aspects have changed over time
- Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night)

### Place knowledge

- Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America

### Human and physical geography

- Describe and understand key aspects of:
  - o Physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle
  - o Human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water

### Geographical skills and fieldwork

- Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied
- Use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world
- Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

Being a Geographer Year 1			Year 2			Year 3		
<ul style="list-style-type: none"> <li>• I can keep a weather chart and answer questions about the weather.</li> <li>• I can explain where I live and tell someone my address.</li> <li>• I can explain some of the main things that are in hot and cold places.</li> <li>• I can explain the clothes that I would wear in hot and cold places.</li> <li>• I can explain how the weather changes throughout the year and name the seasons.</li> <li>• I can name the four countries in the United Kingdom and locate them on a map.</li> <li>• I can name some of the main towns and cities in the United Kingdom.</li> </ul>			<ul style="list-style-type: none"> <li>• I can say what I like and do not like about the place I live in.</li> <li>• I can say what I like and do not like about a different place.</li> <li>• I can describe a place outside Europe using geographical words.</li> <li>• I can describe some of the features of an island.</li> <li>• I can describe the key features of a place from a picture using words like beach, coast, forest, hill, mountain, ocean, valley.</li> <li>• I can explain how jobs may be different in other locations.</li> <li>• I can explain how an area has been spoilt or improved and give my reasons.</li> <li>• I can explain the facilities that a village, town and city may need and give reasons.</li> <li>• I can name the continents of the world and locate them on a map.</li> <li>• I can name the world oceans and locate them on a map.</li> <li>• I can name the capital cities of England, Wales, Scotland and Ireland.</li> <li>• I can find where I live on a map of the United Kingdom</li> </ul>			<ul style="list-style-type: none"> <li>• I can use the correct geographical words to describe a place.</li> <li>• I can use some basic Ordnance Survey map symbols.</li> <li>• I can use grid references on a map.</li> <li>• I can use an atlas by using the index to find places.</li> <li>• I can describe how volcanoes are created.</li> <li>• I can locate and name some of the world's most famous volcanoes.</li> <li>• I can describe how earthquakes are created.</li> <li>• I can name a number of countries in the northern hemisphere.</li> <li>• I can name and locate the capital cities of neighbouring European countries</li> </ul>		
Emerging	Secure	Exceeding	Emerging	Secure	Exceeding	Emerging	Secure	Exceeding
Year 4			Year 5			Year 6		
<ul style="list-style-type: none"> <li>• I can carry out research to discover features of villages, towns or cities.</li> <li>• I can plan a journey to a place in England.</li> <li>• I can collect and accurately measure information (e.g. rainfall, temperature, wind speed, noise levels etc).</li> <li>• I can explain why people may be attracted to live in cities.</li> <li>• I can explain why people may choose to live in one place rather than another.</li> <li>• I can locate the Tropic of Cancer and Tropic of Capricorn.</li> <li>• I can explain the difference between the British Isles, Great Britain and the United Kingdom.</li> <li>• I know the countries that make up the European Union.</li> <li>• I can find at least six cities in the UK on a map.</li> <li>• I can name and locate some of the main islands that surround the United Kingdom.</li> <li>• I can name the areas of origin of the main ethnic groups in the United Kingdom and in our school.</li> </ul>			<ul style="list-style-type: none"> <li>• I can plan a journey to a place in another part of the world, taking account of distance and time.</li> <li>• I can explain why many cities are situated on or close to rivers.</li> <li>• I can explain why people are attracted to live by rivers.</li> <li>• I can explain the course of a river.</li> <li>• I can name and locate many of the world's most famous rivers in an atlas.</li> <li>• I can name and locate many of the world's most famous mountainous regions in an atlas.</li> <li>• I can explain how a location fits into its wider geographical location with reference to human and economical features.</li> </ul>			<ul style="list-style-type: none"> <li>• I can use Ordnance Survey symbols and 6 figure grid references.</li> <li>• I can answer questions by using a map.</li> <li>• I can use maps, aerial photographs, plans and e-resources to describe what a locality might be like.</li> <li>• I can describe how some places are similar and dissimilar in relation to their human and physical features.</li> <li>• I can name the largest desert in the world and locate desert regions in an atlas.</li> <li>• I can identify and name the Tropics of Cancer and Capricorn as well as the Arctic and Antarctic Circles.</li> <li>• I can explain how time zones work and calculate time differences around the world.</li> </ul>		
Emerging	Secure	Exceeding	Emerging	Secure	Exceeding	Emerging	Secure	Exceeding

## Whole School Geography Overview

Year Group	Autumn	Spring	Summer
<b>1</b>	Local Area Map making Where do we live?	Hot and cold places Weather Where do our favourite animals live?	Great Britain – countries, capitals, seas, human and physical geography What are seasons?
<b>2</b>	Local area – looking at London and the local area Where in the world do these people live?	The Gambia – contrasting locality oversees Where does our food come from?	Journeys – canals What are the seven wonders of the world?
<b>3</b>	Locating the UK Where on Earth are we?	Human and Physical Features How does the water go round and round?	Mediterranean Do we like to be beside the seaside?
<b>4</b>	Climate and weather Is climate cool?	How cities and villages have changed over time City and village comparisons	How does the Earth shake, rattle and roll?
<b>5</b>	Local area – Topographical features How is our country changing?	Where our food comes from Where does all our stuff come from?	Holidays Where should we go on holiday? Water and rivers – water cycle
<b>6</b>	Our local area Community Spirit How will our world look in the future?	Sustainability What is life like in the Amazon?	Are we damaging our world?

# Art and Design

## What the National Curriculum requires in art and design at KS1 and KS2

### KS1

#### **Pupils should be taught:**

- to use a range of materials creatively to design and make products
- to use drawing, painting and sculpture to develop and share their ideas, experiences and imagination
- to develop a wide range of art and design techniques in using colour, pattern, texture, line, shape, form and space
- about the work of a range of artists, craft makers and designers, describing the differences and similarities between different practices and disciplines, and making links to their own work.

### KS2

Pupils should be taught to develop their techniques, including their control and their use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design.

#### **Pupils should be taught:**

- to create sketch books to record their observations and use them to review and revisit ideas
- to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]
- about great artists, architects and designers in history.

Being an Artist Year 1			Year 2			Year 3		
<p>I can show how people feel in paintings and drawings.</p> <p>I can create moods in art work.</p> <p>I can use pencils to create lines of different thickness in drawings.</p> <p>I can name the primary and secondary colours.</p> <p>I can create a repeating pattern in print.</p> <p>I can cut, roll and coil materials.</p> <p>I can use IT to create a picture.</p> <p>I can describe what I can see and give an opinion about the work of an artist.</p> <p>I can ask questions about a piece of art.</p>			<p>I can choose and use three different grades of pencil when drawing.</p> <p>I can use charcoal, pencil and pastel to create art.</p> <p>I can use a viewfinder to focus on a specific part of an artefact before drawing it.</p> <p>I can mix paint to create all the secondary colours.</p> <p>I can create brown with paint.</p> <p>I can create tints with paint by adding white.</p> <p>I can create tones with paint by adding black.</p> <p>I can create a printed piece of art by pressing, rolling, rubbing and stamping.</p> <p>I can make a clay pot.</p> <p>I can join two clay finger pots together.</p> <p>I can use different effects within an IT paint package.</p> <p>I can suggest how artists have used colour, pattern and shape.</p> <p>I can create a piece of art in response to the work of another artist.</p>			<p>I can show facial expressions in my art.</p> <p>I can use sketches to produce a final piece of art.</p> <p>I can use different grades of pencil to shade and to show different tones and textures.</p> <p>I can create a background using a wash.</p> <p>I can use a range of brushes to create different effects in painting.</p> <p>I can identify the techniques used by different artists.</p> <p>I can use digital images and combine with other media in my art.</p> <p>I can use IT to create art which includes my own work and that of others.</p> <p>I can compare the work of different artists.</p> <p>I recognise when art is from different cultures.</p> <p>I recognise when art is from different historical periods.</p>		
Emerging	Secure	Exceeding	Emerging	Secure	Exceeding	Emerging	Secure	Exceeding
Year 4			Year 5			Year 6		
<p>I can show facial expressions and body language in sketches and paintings.</p> <p>I can use marks and lines to show texture in my art.</p> <p>I can use line, tone, shape and colour to represent figure and forms in movement.</p> <p>I can show reflections in my art.</p> <p>I can print onto different materials using at least four colours.</p> <p>I can sculpt clay and other mouldable materials.</p> <p>I can integrate my digital images into my art.</p> <p>I can experiment with the styles used by other artists.</p> <p>I can explain some of the features of art from historical periods.</p>			<p>I can identify and draw objects and use marks and lines to produce texture.</p> <p>I can successfully use shading to create mood and feeling.</p> <p>I can organise line, tone, shape and colour to represent figures and forms in movement.</p> <p>I can use shading to create mood and feeling.</p> <p>I can express emotion in my art.</p> <p>I can create an accurate print design following criteria.</p> <p>I can use images which I have created, scanned and found; altering them where necessary to create art.</p> <p>I can research the work of an artist and use their work to replicate a style.</p>			<p>I can explain why I have used different tools to create art.</p> <p>I can explain why I have chosen specific techniques to create my art.</p> <p>I can explain the style of my work and how it has been influenced by a famous artist.</p> <p>I can over print to create different patterns.</p> <p>I can use feedback to make amendments and improvement to my art.</p> <p>I can use a range of e-resources to create art.</p>		
Emerging	Secure	Exceeding	Emerging	Secure	Exceeding	Emerging	Secure	Exceeding

## Whole School Art and Design Overview

Year Group	Autumn	Spring	Summer
1	Drawing Textiles – weaving Use of IT – Revelation Art Junior	Drawing Painting – Animals Patterns Collage – Animal Portraits	Drawing Printing – vegetable and fruit prints Painting - landscapes
2	Explaining different tools. Colour mixing. Prelim drawings.	African Inspired Art.	Artist study – Degas and Laury
3	Patrick Caulfield	Painting using natural resources	Pencil portraits
4	Printing and Digital Media	Clay	Pencil sketch portrait
5	Greek art Pottery	William Morris – clay tile	Techniques by different artists
6		Andy Warhol  Pop Art	Peter Thorpe Space Art

# Design Technology - What the National Curriculum requires in design and technology

## KS1

### Design

- Design purposeful, functional, appealing products for themselves and other users based on design criteria
- Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

### Make

- Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

### Evaluate

- Explore and evaluate a range of existing products
- Evaluate their ideas and products against design criteria

### Technical knowledge

- Build structures, exploring how they can be made stronger, stiffer and more stable
- Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

## KS2

### Design

- Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

### Make

- Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

### Evaluate

- Investigate and analyse a range of existing products
- Evaluate their ideas and products against their own design criteria and consider the views of others to

### Improve their work

- Understand how key events and individuals in design and technology have helped shape the world

### Technical knowledge

- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- Apply their understanding of computing to program, monitor and control their products.

Being a Designer Year 1			Year 2			Year 3		
<ul style="list-style-type: none"> <li>• I can use my own ideas to make something.</li> <li>• I can describe how something works.</li> <li>• I can cut food safely.</li> <li>• I can make a product which moves.</li> <li>• I can make my model stronger.</li> <li>• I can explain to someone else how I want to make my product.</li> <li>• I can choose appropriate resources and tools.</li> <li>• I can make a simple plan before making.</li> </ul>			<ul style="list-style-type: none"> <li>• I can think of an idea and plan what to do next.</li> <li>• I can choose tools and materials and explain why I have chosen them.</li> <li>• I can join materials and components in different ways.</li> <li>• I can explain what went well with my work.</li> <li>• I can explain why I have chosen specific textiles.</li> <li>• I can measure materials to use in a model or structure.</li> <li>• I can describe the ingredients I am using.</li> </ul>			<ul style="list-style-type: none"> <li>• I can prove that my design meets some set criteria.</li> <li>• I can follow a step-by-step plan, choosing the right equipment and materials.</li> <li>• I can design a product and make sure that it looks attractive.</li> <li>• I can choose a textile for both its suitability and its appearance.</li> <li>• I can select the most appropriate tools and techniques for a given task.</li> <li>• I can make a product which uses both electrical and mechanical components.</li> <li>• I can work accurately to measure, make cuts and make holes.</li> <li>• I can describe how food ingredients come together.</li> </ul>		
Emerging	Secure	Exceeding	Emerging	Secure	Exceeding	Emerging	Secure	Exceeding
Year 4			Year 5			Year 6		
<ul style="list-style-type: none"> <li>• I can use ideas from other people when I am designing.</li> <li>• I can produce a plan and explain it.</li> <li>• I can evaluate and suggest improvements for my designs.</li> <li>• I can evaluate products for both their purpose and appearance.</li> <li>• I can explain how I have improved my original design.</li> <li>• I can present a product in an interesting way.</li> <li>• I can measure accurately.</li> <li>• I can persevere and adapt my work when my original ideas do not work.</li> <li>• I know how to be both hygienic and safe when using food.</li> </ul>			<ul style="list-style-type: none"> <li>• I can come up with a range of ideas after collecting information from different sources.</li> <li>• I can produce a detailed, step-by-step plan.</li> <li>• I can suggest alternative plans; outlining the positive features and draw backs.</li> <li>• I can explain how a product will appeal to a specific audience.</li> <li>• I can evaluate appearance and function against original criteria.</li> <li>• I can use a range of tools and equipment competently.</li> <li>• I can make a prototype before make a final version.</li> <li>• I show that I can be both hygienic and safe in the kitchen.</li> </ul>			<ul style="list-style-type: none"> <li>• I can use market research to inform my plans and ideas.</li> <li>• I can follow and refine my plans.</li> <li>• I can justify my plans in a convincing way.</li> <li>• I can show that I consider culture and society in my plans and designs.</li> <li>• I show that I can test and evaluate my products.</li> <li>• I can explain how products should be stored and give reasons.</li> <li>• I can work within a budget.</li> <li>• I can evaluate my product against clear criteria.</li> </ul>		
Emerging	Secure	Exceeding	Emerging	Secure	Exceeding	Emerging	Secure	Exceeding



## Whole School Design Technology Overview

Year Group	Autumn	Spring	Summer
<b>1</b>	Food (cooking in the curriculum) – Fruit pot crunch and Fruit Kebabs  Textiles – felt Christmas ornament	Food (cooking in the curriculum) – Coleslaw and fruity pud  Mechanisms – Moving animal puppet	Food (cooking in the curriculum) – Filled wraps, Dips and dunkers  Mechanisms – Pop up picture (seaside)
<b>2</b>	Food (cooking in the curriculum) – Pinwheel sandwiches and Pizza  Using materials	Food (cooking in the curriculum) – Cheese straws and Tinned fruit crumble  Using materials to make Gambia outfit	Food (cooking in the curriculum) – Tinned fruit crumble and Shortbread  Construction – designing and making a space buggy
<b>3</b>	Food (cooking in the curriculum) – Fruity fool and Pasta salad  Sewing	Food (cooking in the curriculum) – Cheese and sweetcorn scones  Modelling – round houses	Food (cooking in the curriculum) – Filled wraps, Black country fruit biscuit  Design and make torches
<b>4</b>	Food (cooking in the curriculum) – Bread rolls and Bread and butter pudding  Sewing – Victorian Purses	Food (cooking in the curriculum) – Bread and butter pudding  Wheels and Axels – Roman Chariots	Food (cooking in the curriculum) – Black country biscuits and Greek salad  Interactive children's book
<b>5</b>	Food (cooking in the curriculum) – Pasta Romonov and Shortbread  Recycled materials to make houses	Food (cooking in the curriculum) – Fruity pud  Design food packaging	Food (cooking in the curriculum) - Scones  Textiles linked to water aid
<b>6</b>	Food (cooking in the curriculum) - Pizza  Houses of the Future	Food (cooking in the curriculum) – Bread rolls and Greek salad	Food (cooking in the curriculum)

# Music

## What the National Curriculum requires in music at KS1 and KS2

### Pupils should be taught to:

#### KS1

- Use their voices expressively and creatively by singing songs and speaking chants and rhymes
- Play tuned and untuned instruments musically
- Listen with concentration and understanding to a range of high-quality live and recorded music
- Experiment with, create, select and combine sounds using the inter-related dimensions of music.

#### KS2

Pupils should be taught to sing and play musically with increasing confidence and control. They should develop an understanding of musical composition, organising and manipulating ideas within musical structures and reproducing sounds from aural memory.

Pupils should be taught to:

- Play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression
- Improvise and compose music for a range of purposes using the inter-related dimensions of music
- Listen with attention to detail and recall sounds with increasing aural memory
- Use and understand staff and other musical notations
- Appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians
- Develop an understanding of the history of music.

Being a Musician Year 1			Year 2			Year 3		
<ul style="list-style-type: none"> <li>• I can use my voice to speak, sing and chant.</li> <li>• I can use instruments to perform.</li> <li>• I can clap short rhythmic patterns.</li> <li>• I can make different sounds with my voice and with instruments.</li> <li>• I can repeat short rhythmic and melodic patterns.</li> <li>• I can make a sequence of sounds.</li> <li>• I can respond to different moods in music.</li> <li>• I can say whether I like or dislike a piece of music.</li> <li>• I can choose sounds to represent different things.</li> <li>• I can follow instructions about when to play and sing.</li> </ul>			<ul style="list-style-type: none"> <li>• I can sing and follow a melody.</li> <li>• I can perform simple patterns and accompaniments keeping a steady pulse.</li> <li>• I can play simple rhythmic patterns on an instrument.</li> <li>• I can sing or clap increasing and decreasing tempo.</li> <li>• I can order sounds to create a beginning, middle and an end.</li> <li>• I can create music in response to different starting points.</li> <li>• I can choose sounds which create an effect.</li> <li>• I can use symbols to represent sounds.</li> <li>• I can make connections between notations and musical sounds.</li> <li>• I can listen out for particular things when listening to music.</li> <li>• I can improve my own work.</li> </ul>			<ul style="list-style-type: none"> <li>• I can sing a tune with expression.</li> <li>• I can play clear notes on instruments.</li> <li>• I can use different elements in my composition.</li> <li>• I can create repeated patterns with different instruments.</li> <li>• I can compose melodies and songs.</li> <li>• I can create accompaniments for tunes.</li> <li>• I can combine different sounds to create a specific mood or feeling.</li> <li>• I can use musical words to describe a piece of music and compositions.</li> <li>• I can use musical words to describe what I like and do not like about a piece of music.</li> <li>• I can recognise the work of at least one famous composer.</li> <li>• I can improve my work; explaining how it has been improved.</li> </ul>		
Emerging	Secure	Exceeding	Emerging	Secure	Exceeding	Emerging	Secure	Exceeding
Year 4			Year 5			Year 6		
<ul style="list-style-type: none"> <li>• I can perform a simple part rhythmically.</li> <li>• I can sing songs from memory with accurate pitch.</li> <li>• I can improvise using repeated patterns.</li> <li>• I can use notation to record and interpret sequences of pitches.</li> <li>• I can use notation to record compositions in a small group or on my own.</li> <li>• I can explain why silence is often needed in music and explain what effect it has.</li> <li>• I can identify the character in a piece of music.</li> <li>• I can identify and describe the different purposes of music.</li> <li>• I can begin to identify the style of work of Beethoven, Mozart and Elgar.</li> </ul>			<ul style="list-style-type: none"> <li>• I can breathe in the correct place when singing.</li> <li>• I can maintain my part whilst others are performing their part.</li> <li>• I can improvise within a group using melodic and rhythmic phrases.</li> <li>• I can change sounds or organise them differently to change the effect.</li> <li>• I can compose music which meets specific criteria.</li> <li>• I can use notation to record groups of pitches (chords).</li> <li>• I can use my music diary to record aspects of the composition process.</li> <li>• I can choose the most appropriate tempo for a piece of music.</li> <li>• I can describe, compare and evaluate music using musical vocabulary.</li> <li>• I can explain why I think music is successful or unsuccessful.</li> <li>• I can suggest improvement to my own work and that of others.</li> <li>• I can contrast the work of a famous composer and explain my preferences.</li> </ul>			<ul style="list-style-type: none"> <li>• I can sing in harmony confidently and accurately.</li> <li>• I can perform parts from memory.</li> <li>• I can take the lead in a performance.</li> <li>• I can use a variety of different musical devices in my composition (including melody, rhythms and chords).</li> <li>• I can evaluate how the venue, occasion and purpose affects the way a piece of music is created.</li> <li>• I can analyse features within different pieces of music.</li> <li>• I can compare and contrast the impact that different composers from different times have had on people of that time.</li> </ul>		
Emerging	Secure	Exceeding	Emerging	Secure	Exceeding	Emerging	Secure	Exceeding

## Whole School Music Overview

Year Group	Autumn	Spring	Summer
1	Our school – Exploring sounds Number – Exploring beat	Animals – Exploring Pitch Pattern – Exploring Beat	Seasons – Exploring Pitch Story Time – Exploring sounds
2	Changes in musical elements	Recorders African Music Call and response	Exploring timbre, tempo and dynamics. Space music
3	Listening and responding to music	Composition – stone age music	C Sharp
4	Composing – weather songs Victorian music hall and Elgar	Composing – Roman battle music Composer Study – Beethoven and Mozart	Composing Raps for Father's day performance Drumming – Volcano/Earthquake compositions
5	Famous musicians Christmas concert	Composing own music – link to science	Listening and composing. Water music – Handel
6		History of Blues Music Blues Chord Sequence	

# Physical Education

## **What the National Curriculum requires in physical education at KS1 and KS2**

### Key stage 1

Pupils should be taught to:

- Master basic movements including running, jumping, throwing and catching, as well as developing balance, agility and co-ordination, and begin to apply these in a range of activities
- Participate in team games, developing simple tactics for attacking and defending
- Perform dances using simple movement patterns.

### Key stage 2

Pupils should continue to apply and develop a broader range of skills, learning how to use them in different ways and to link them to make actions and sequences of movement. They should enjoy communicating, collaborating and competing with each other. They should develop an understanding of how to improve in different physical activities and sports and learn how to evaluate and recognise their own success.

Pupils should be taught to:

- Use running, jumping, throwing and catching in isolation and in combination
- Play competitive games, modified where appropriate [for example, badminton, basketball, cricket, football, hockey, netball, rounders and tennis], and apply basic principles suitable for attacking and defending
- Develop flexibility, strength, technique, control and balance [for example, through athletics and gymnastics]
- Perform dances using a range of movement patterns
- Take part in outdoor and adventurous activity challenges both individually and within a team
- Compare their performances with previous ones and demonstrate improvement to achieve their personal best.

### Swimming and water safety

All schools must provide swimming instruction either in key stage 1 or key stage 2.

In particular, pupils should be taught to:

- Swim competently, confidently and proficiently over a distance of at least 25 metres
- Use a range of strokes effectively [for example, front crawl, backstroke and breaststroke]
- Perform safe self-rescue in different water-based situations.

Being a Sports Person – Year 1			Year 2			Year 3		
<u>Games</u> <ul style="list-style-type: none"> <li>• I can throw underarm.</li> <li>• I can hit a ball with a bat.</li> <li>• I can move and stop safely.</li> <li>• I can throw and catch with both hands.</li> <li>• I can throw and kick in different ways.</li> </ul> <u>Gymnastics</u> <ul style="list-style-type: none"> <li>• I can make my body curled, tense, stretched and relaxed.</li> <li>• I can control my body when travelling and balancing.</li> <li>• I can copy sequences and repeat them.</li> <li>• I can roll, curl, travel and balance in different ways.</li> </ul> <u>Dance</u> <ul style="list-style-type: none"> <li>• I can move to music.</li> <li>• I can copy dance moves.</li> <li>• I can perform my own dance moves.</li> <li>• I can make up a short dance.</li> <li>• I can move safely in a space.</li> </ul> <u>General</u> <ul style="list-style-type: none"> <li>• I can copy actions.</li> <li>• I can repeat actions and skills.</li> <li>• I can move with control and care.</li> <li>• I can use equipment safely.</li> </ul>			<u>Games</u> <ul style="list-style-type: none"> <li>• I can use hitting, kicking and/or rolling in a game.</li> <li>• I can decide the best space to be in during a game.</li> <li>• I can use one tactic in a game.</li> <li>• I can follow rules.</li> </ul> <u>Gymnastics</u> <ul style="list-style-type: none"> <li>• I can plan and perform a sequence of movements.</li> <li>• I can improve my sequence based on feedback.</li> <li>• I can think of more than one way to create a sequence which follows some 'rules'.</li> <li>• I can work on my own and with a partner.</li> </ul> <u>Dance</u> <ul style="list-style-type: none"> <li>• I can change rhythm, speed, level and direction in my dance.</li> <li>• I can dance with control and coordination.</li> <li>• I can make a sequence by linking sections together.</li> <li>• I can use dance to show a mood or feeling.</li> </ul> <u>General</u> <ul style="list-style-type: none"> <li>• I can copy and remember actions.</li> <li>• I can talk about what is different from what I did and what someone else did</li> </ul>			<u>Games</u> <ul style="list-style-type: none"> <li>• I can throw and catch with control.</li> <li>• I am aware of space and use it to support team-mates and to cause problems for the opposition.</li> <li>• I know and use rules fairly.</li> </ul> <u>Gymnastics</u> <ul style="list-style-type: none"> <li>• I can adapt sequences to suit different types of apparatus and criteria.</li> <li>• I can explain how strength and suppleness affect performance.</li> <li>• I can compare and contrast gymnastic sequences.</li> </ul> <u>Dance</u> <ul style="list-style-type: none"> <li>• I can improvise freely and translate ideas from a stimulus into movement.</li> <li>• I can share and create phrases with a partner and small group.</li> <li>• I can repeat, remember and perform phrases.</li> </ul> <u>Athletics</u> <ul style="list-style-type: none"> <li>• I can run at fast, medium and slow speeds; changing speed and direction.</li> <li>• I can take part in a relay, remembering when to run and what to do.</li> </ul> <u>Outdoor and adventurous</u> <ul style="list-style-type: none"> <li>• I can follow a map in a familiar context.</li> <li>• I can use clues to follow a route.</li> <li>• I can follow a route safely.</li> </ul>		
Emerging	Secure	Exceeding	Emerging	Secure	Exceeding	Emerging	Secure	Exceeding
Year 4			Year 5			Year 6		
<u>Games</u> <ul style="list-style-type: none"> <li>• I can catch with one hand.</li> <li>• I can throw and catch accurately.</li> <li>• I can hit a ball accurately with control.</li> <li>• I can keep possession of the ball.</li> <li>• I can vary tactics and adapt skills depending on what is happening in a game.</li> </ul> <u>Gymnastics</u> <ul style="list-style-type: none"> <li>• I can work in a controlled way.</li> <li>• I can include change of speed and direction.</li> <li>• I can include a range of shapes.</li> <li>• I can work with a partner to create, repeat and improve a sequence with at least three phases.</li> </ul> <u>Dance</u> <ul style="list-style-type: none"> <li>• I can take the lead when working with a partner or group.</li> <li>• I can use dance to communicate an idea.</li> </ul> <u>Athletics</u> <ul style="list-style-type: none"> <li>• I can run over a long distance.</li> <li>• I can sprint over a short distance.</li> <li>• I can throw in different ways.</li> <li>• I can hit a target.</li> <li>• I can jump in different ways.</li> </ul> <u>Outdoor and adventurous</u> <ul style="list-style-type: none"> <li>• I can follow a map in a (more demanding) familiar context.</li> <li>• I can follow a route within a time limit.</li> </ul>			<u>Games</u> <ul style="list-style-type: none"> <li>• I can gain possession by working a team.</li> <li>• I can pass in different ways.</li> <li>• I can use forehand and backhand with a racket.</li> <li>• I can field.</li> <li>• I can choose a tactic for defending and attacking.</li> <li>• I can use a number of techniques to pass, dribble and shoot.</li> </ul> <u>Gymnastics</u> <ul style="list-style-type: none"> <li>• I can make complex extended sequences.</li> <li>• I can combine action, balance and shape.</li> <li>• I can perform consistently to different audiences.</li> </ul> <u>Dance</u> <ul style="list-style-type: none"> <li>• I can compose my own dances in a creative way.</li> <li>• I can perform to an accompaniment.</li> <li>• My dance shows clarity, fluency, accuracy and consistency.</li> </ul> <u>Athletics</u> <ul style="list-style-type: none"> <li>• I can be controlled when taking off and landing.</li> <li>• I can throw with accuracy.</li> <li>• I can combine running and jumping.</li> </ul> <u>Outdoor and adventurous</u> <ul style="list-style-type: none"> <li>• I can follow a map in an unknown location.</li> <li>• I can use clues and a compass to navigate a route.</li> <li>• I can change my route to overcome a problem.</li> <li>• I can use new information to change my route.</li> </ul>			<u>Games</u> <ul style="list-style-type: none"> <li>• I can play to agreed rules.</li> <li>• I can explain rules.</li> <li>• I can umpire.</li> <li>• I can make a team and communicate plan.</li> <li>• I can lead others in a game situation.</li> </ul> <u>Gymnastics</u> <ul style="list-style-type: none"> <li>• I can combine my own work with that of others.</li> <li>• I can link sequences to specific timings.</li> </ul> <u>Dance</u> <ul style="list-style-type: none"> <li>• I can develop sequences in a specific style.</li> <li>• I can choose my own music and style.</li> </ul> <u>Athletics</u> <ul style="list-style-type: none"> <li>• I can demonstrate stamina.</li> </ul> <u>Outdoor and adventurous</u> <ul style="list-style-type: none"> <li>• I can plan a route and a series of clues for someone else.</li> <li>• I can plan with others taking account of safety and danger.</li> </ul>		

## Whole School PE Overview

Year Group	Autumn	Spring	Summer
<b>1</b>	Gym 1-6 Dance 1-6 Games Strike/Field 1-12	Gym 7-12 Dance 7-12 Games Net 1-12	Gym 13-16 Dance 13-16 Athletics 1-6 OAA 1-6
<b>2</b>	Gym 1-6 Dance 1-6 Games Strike/Field 1-8 Games Net – 1-8	Gym 7-12 Dance 7-12 Games Invasion 1-8	Gym 13-16 Dance 13-16 Athletics 1-6 OAA 1-6
<b>3</b>	Gym 1-6 Dance 1-6 Games Strike/Field 1-8 Games Net – 1-8	Gym 7-12 Dance 7-12 Games Invasion 1-12	Gym 13-16 Dance 13-16 Athletics 1-6 OAA 1-6 Swimming
<b>4</b>	Gym 1-6 Dance 1-6 Games Strike/Field 1-10 Games Net – 1-6	Gym 7-12 Dance 7-12 Games Invasion 1-12 Swimming	Gym 13-16 Dance 13-16 Athletics 1-6 OAA 1-6
<b>5</b>	Gym 1-6 Dance 1-6 Games Strike/Field 1-8 Games Net – 1-7	Gym 7-12 Dance 7-12 Games Invasion 1-13	Gym 13-16 Dance 13-16 Athletics 1-6 OAA 1-6
<b>6</b>	Gym 1-6 Dance 1-6 Games Strike/Field 1-10 Games Net – 1-8	Gym 7-12 Dance 7-12 Games Invasion 1-10	Gym 13-16 Dance 13-16 Athletics 1-6 OAA 1-6

## Computing - What the National Curriculum requires in computing

### KS1

Pupils should be taught to:

- Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- Create and debug simple programs
- Use logical reasoning to predict the behaviour of simple programs
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content
- Recognise common uses of information technology beyond school
- Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

### KS2

Pupils should be taught to:

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration
- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.



Being a Computer User - Year 1			Year 2			Year 3		
<u>Algorithms and programming</u> <ul style="list-style-type: none"> <li>• I can create a series of instructions.</li> <li>• I can plan a journey for a programmable toy.</li> </ul> <u>Information technology</u> <ul style="list-style-type: none"> <li>• I can create digital content.</li> <li>• I can store digital content.</li> <li>• I can retrieve digital content.</li> <li>• I can use a web site.</li> <li>• I can use a camera.</li> <li>• I can record sound and play back.</li> </ul> <u>Digital literacy</u> <ul style="list-style-type: none"> <li>• I can use technology safely.</li> <li>• I can keep personal information private.</li> </ul>			<u>Algorithms and programming</u> <ul style="list-style-type: none"> <li>• I can use a range of instructions (e.g. direction, angles, turns).</li> <li>• I can test and amend a set of instructions.</li> <li>• I can find errors and amend. (debug)</li> <li>• I can write a simple program and test it.</li> <li>• I can predict what the outcome of a simple program will be (logical reasoning).</li> <li>• I understand that algorithms are used on digital devices.</li> <li>• I understand that programs require precise instructions.</li> </ul> <u>Information technology</u> <ul style="list-style-type: none"> <li>• I can organise digital content.</li> <li>• I can retrieve and manipulate digital content.</li> <li>• I can navigate the web to complete simple searches.</li> </ul> <u>Digital literacy</u> <ul style="list-style-type: none"> <li>• I use technology respectfully.</li> <li>• I know where to go for help if I am concerned.</li> <li>• I know how technology is used in school and outside of school.</li> </ul>			<u>Algorithms and programming</u> <ul style="list-style-type: none"> <li>• I can design a sequence of instructions, including directional instructions.</li> <li>• I can write programs that accomplish specific goals.</li> <li>• I can work with various forms of input.</li> <li>• I can work with various forms of output.</li> </ul> <u>Information technology</u> <ul style="list-style-type: none"> <li>• I can use a range of software for similar purposes.</li> <li>• I can collect information.</li> <li>• I can design and create content.</li> <li>• I can present information.</li> <li>• I can search for information on the web in different ways.</li> <li>• I can manipulate and improve digital images.</li> </ul> <u>Digital literacy</u> <ul style="list-style-type: none"> <li>• I use technology respectfully and responsibly.</li> <li>• I know different ways I can get help if I am concerned.</li> <li>• I understand what computer networks do and how they provide multiple services.</li> <li>• I can discern where it is best to use technology and where it adds little or no value.</li> </ul>		
Emerging	Secure	Exceeding	Emerging	Secure	Exceeding	Emerging	Secure	Exceeding
Year 4			Year 5			Year 6		
<u>Algorithms and programming</u> <ul style="list-style-type: none"> <li>• I can experiment with variables to control models.</li> <li>• I can give an on-screen robot specific instructions that takes them from A to B.</li> <li>• I can make an accurate prediction and explain why I believe something will happen (linked to programming).</li> <li>• I can de-bug a program.</li> </ul> <u>Information technology</u> <ul style="list-style-type: none"> <li>• I can select and use software to accomplish given goals.</li> <li>• I can collect and present data.</li> <li>• I can produce and upload a pod cast.</li> </ul> <u>Digital literacy</u> <ul style="list-style-type: none"> <li>• I recognise acceptable and unacceptable behaviour using technology.</li> </ul>			<u>Algorithms and programming</u> <ul style="list-style-type: none"> <li>• I can combine sequences of instructions and procedures to turn devices on and off.</li> <li>• I can use technology to control an external device.</li> <li>• I can design algorithms that use repetition &amp; 2-way selection.</li> </ul> <u>Information technology</u> <ul style="list-style-type: none"> <li>• I can analyse information.</li> <li>• I can evaluate information.</li> <li>• I understand how search results are selected and ranked.</li> <li>• I can edit a film.</li> </ul> <u>Digital literacy</u> <ul style="list-style-type: none"> <li>• I understand that you have to make choices when using technology and that not everything is true and/or safe.</li> </ul>			<u>Algorithms and programming</u> <ul style="list-style-type: none"> <li>• I can design a solution by breaking a problem up.</li> <li>• I recognise that different solutions can exist for the same problem.</li> <li>• I can use logical reasoning to detect errors in algorithms.</li> <li>• I can use selection in programs.</li> <li>• I can work with variables.</li> <li>• I can explain how an algorithm works.</li> <li>• I can explore 'what if' questions by planning different scenarios for controlled devices.</li> </ul> <u>Information technology</u> <ul style="list-style-type: none"> <li>• I can select, use and combine software on a range of digital devices.</li> <li>• I can use a range of technology for a specific project.</li> </ul> <u>Digital literacy</u> <ul style="list-style-type: none"> <li>• I can discuss the risks of online use of technology.</li> <li>• I can identify how to minimise risks.</li> </ul>		

Being a safe computer user – Years 1 and 2					
<u>Knowledge and understanding</u> <ul style="list-style-type: none"> <li>• I understand the different methods of communication (e.g. email, online forums etc).</li> <li>• I know you should only open email from a known source.</li> <li>• I know the difference between email and communication systems such as blogs and wikis.</li> <li>• I know that websites sometimes include pop-ups that take me away from the main site.</li> <li>• I know that bookmarking is a way to find safe sites again quickly.</li> <li>• I have begun to evaluate websites and know that everything on the internet is not true.</li> <li>• I know that it is not always possible to copy some text and pictures from the internet.</li> <li>• I know that personal information should not be shared online.</li> <li>• I know I must tell a trusted adult immediately if anyone tries to meet me via the internet.</li> </ul>			<u>Skills</u> <ul style="list-style-type: none"> <li>• I follow the school's safer internet rules.</li> <li>• I can use the search engines agreed by the school.</li> <li>• I know what to do if I find something inappropriate online or something I am unsure of (including identifying people who can help; minimising screen; online reporting using school system etc).</li> <li>• I can use the internet for learning and communicating with others, making choices when navigating through sites.</li> <li>• I can send and receive email as a class.</li> <li>• I can recognise advertising on websites and learn to ignore it.</li> <li>• I can use a password to access the secure network.</li> </ul>		
Emerging	Secure	Exceeding	Emerging	Secure	Exceeding
Years 3 and 4					
<u>Knowledge and understanding</u> <ul style="list-style-type: none"> <li>• I understand the need for rules to keep me safe when exchanging learning and ideas online.</li> <li>• I recognise that information on the internet may not be accurate or reliable and may be used for bias, manipulation or persuasion.</li> <li>• I understand that the internet contains fact, fiction and opinion and begin to distinguish between them.</li> <li>• I use strategies to verify information, e.g. cross-checking.</li> <li>• I understand the need for caution when using an internet search for images and what to do if I find an unsuitable image.</li> <li>• I understand that copyright exists on most digital images, video and recorded music.</li> <li>• I understand the need to keep personal information and passwords private.</li> <li>• I understand that if I make personal information available online it may be seen and used by others.</li> <li>• I know how to respond if asked for personal information or feel unsafe about content of a message.</li> <li>• I recognise that cyber bullying is unacceptable and will be sanctioned in line with the school's policy.</li> <li>• I know how to report an incident of cyber bullying.</li> <li>• I know the difference between online communication tools used in school and those used at home.</li> <li>• I understand the need to develop an alias for some public online use.</li> <li>• I understand that the outcome of internet searches at home may be different than at school</li> </ul>			<u>Skills</u> <ul style="list-style-type: none"> <li>• I follow the school's safer internet rules.</li> <li>• I recognise the difference between the work of others which has been copied (plagiarism) and re-structuring and re-presenting materials in ways which are unique and new.</li> <li>• I can identify when emails should not be opened and when an attachment may not be safe.</li> <li>• I can explain and demonstrate how to use email safely.</li> <li>• I can use different search engines.</li> </ul>		
Emerging	Secure	Exceeding	Emerging	Secure	Exceeding

Years 5 and 6					
<u>Knowledge and understanding</u> <ul style="list-style-type: none"> <li>• I can discuss the positive and negative impact of the use of ICT in my own life, my friends and family.</li> <li>• I understand the potential risk of providing personal information online.</li> <li>• I recognise why people may publish content that is not accurate and understand the need to be critical evaluators of content.</li> <li>• I understand that some websites and/or pop-ups have commercial interests that may affect the way the information is presented.</li> <li>• I recognise the potential risks of using internet communication tools and understand how to minimise those risks (including scams and phishing).</li> <li>• I understand that some material on the internet is copyrighted and may not be copied or downloaded.</li> <li>• I understand that some messages may be malicious and know how to deal with this.</li> <li>• I understand that online environments have security settings, which can be altered, to protect the user.</li> <li>• I understand the benefits of developing a 'nickname' for online use.</li> <li>• I understand that some malicious adults may use various techniques to make contact and elicit personal information.</li> <li>• I know that it is unsafe to arrange to meet unknown people online.</li> <li>• I know how to report any suspicions.</li> <li>• I understand I should not publish other people's pictures or tag them on the internet without permission.</li> <li>• I know that content put online is extremely difficult to remove.</li> <li>• I know what to do if I discover something malicious or inappropriate.</li> </ul>			<u>Skills</u> <ul style="list-style-type: none"> <li>• I follow the school's safer internet rules.</li> <li>• I can make safe choices about the use of technology.</li> <li>• I can use technology in ways which minimises risk. e.g. responsible use of online discussions, etc.</li> <li>• I can create strong passwords and manage them so that they remain strong.</li> <li>• I can independently, and with regard for e -safety, select and use appropriate communication tools to solve problems by collaborating and communicating with others within and beyond school.</li> <li>• I can competently use the internet as a search tool.</li> <li>• I can reference information sources.</li> <li>• I can use appropriate strategies for finding, critically evaluating, validating and verifying information. e.g. using different keywords, skim reading to check relevance of information, cross checking with different websites or other non ICT resources.</li> <li>• I can use knowledge of the meaning of different domain names and common website extensions (e.g. .co.uk; .com; .ac; .sch; .org; .gov; .net) to support validation of information.</li> </ul>		
Emerging	Secure	Exceeding	Emerging	Secure	Exceeding

## Whole School Overview Computing

Year Group	Autumn	Spring	Summer
<b>1</b>	We are treasure hunters (Algorithms and programs) We are TV chefs E Safety	Communicating safely We are collectors (Data retrieving and organising) E Safety	Data retrieving and organising We are storytellers E Safety
<b>2</b>	We are Astronauts (Algorithms and programs) We are Researchers (Data retrieving and organising) E Safety	Communicating safely E Safety	We are photographers We are zoologists E Safety
<b>3</b>	We are network engineers (Using the Internet) We are Programmers (Algorithms and programs) E Safety	Communicating safely Presentation E Safety	Databases Data retrieving and organising E Safety
<b>4</b>	Databases Using the internet E Safety	Communicating safely Data retrieving and organising E Safety	Algorithms and programs Presentation E Safety
<b>5</b>	Using the Internet Presentation E Safety	Communicating safely Algorithms and programs E Safety	Databases Data retrieving and organising E Safety
<b>6</b>	Using the Internet Communicating safely E Safety	Presentation Algorithms and programs E Safety	Data retrieving and organising Databases E Safety

## Whole School Overview – E-Safety

Year Group	Autumn	Spring	Summer
<b>1</b>	Going places safely ABC Searching	Internet safety day Keep it private	My creative work Sending email
<b>2</b>	Staying safe online Follow the digital trail	Internet safety day Screen out the mean	Using keywords Sites I like
<b>3</b>	Powerful passwords My online community	Internet safety day Things for sale	Show respect online Writing good emails
<b>4</b>	Rings of responsibility Private and personal information	Internet safety day The power of words	The key to keywords Whose is it anyway?
<b>5</b>	Strong passwords Digital citizenship pledge	Internet safety day You've won a prize	How to cite a site Picture perfect
<b>6</b>	Talking safely online Super digital citizen	Internet safety day Privacy rules	What's cyberbullying Selling stereotypes

## Whole School Overview – Religious Education

Year Group	Autumn	Spring	Summer
<b>1</b>	Christianity Creation  Christianity Christmas	Christianity Jesus as a Friend  Christianity Palm Sunday	Judaism Shabbat  Judaism Chanukah
<b>2</b>	Christianity What did Jesus teach?  Christmas Jesus as a gift from God	Islam Prayer at home  Christianity Easter - Resurrection	Islam Community and belonging  Islam Hajj
<b>3</b>	Sikhism The Amrit ceremony and the Khalsa  Christianity Christmas	Christianity Jesus Miracles  Christianity Easter forgiveness	Sikhism Sharing and Community  Sikhism Prayer and Worship
<b>4</b>	Judaism Beliefs and Practices  Christianity Christmas	Judaism Passover  Christianity Easter	Judaism Rites of passage and good works  Christianity Prayer and Worship
<b>5</b>	Hinduism Prayer and Worship  Christianity Christmas	Hinduism Hindu Beliefs  Christianity Easter	Hinduism Beliefs and Moral Values  Christianity Beliefs and Practices
<b>6</b>	Islam Beliefs and Practices  Christianity Christmas	Christianity Beliefs and Meaning  Christianity Easter	Islam Beliefs and Moral views  Islam Belief and Moral Values

## Whole School Overview – Personal Social Health Economic (PSHE) Education

Year Group	Autumn	Spring	Summer
<b>1</b>	<p>We're all stars!</p> <ul style="list-style-type: none"> <li>- Community</li> <li>- Rights and responsibilities</li> <li>- Getting to know each other</li> <li>- Working together</li> </ul> <p>Be friendly, be wise</p> <ul style="list-style-type: none"> <li>- Making and sustaining friendships</li> <li>- Conflict resolution</li> <li>- Anti-bullying</li> <li>- Keeping safe at home and outdoors</li> </ul>	<p>Live long, living strong</p> <ul style="list-style-type: none"> <li>- Health eating and exercise</li> <li>- Goal setting and motivation</li> </ul> <p>Daring to be different</p> <ul style="list-style-type: none"> <li>- Identity and self esteem</li> <li>- Difference and diversity</li> <li>- Peer influence and assertiveness</li> </ul>	<p>Dear diary</p> <ul style="list-style-type: none"> <li>- Comfortable and uncomfortable feelings</li> <li>- Problems in relationships</li> <li>- Anti-bullying</li> <li>- Help and support</li> </ul> <p>Joining in and joining up</p> <ul style="list-style-type: none"> <li>- Needs and responsibilities</li> <li>- Participation</li> <li>- Local democracy</li> <li>- Voluntary groups</li> <li>- Fund raising activities</li> </ul>
<b>2</b>	<p>It's our world</p> <ul style="list-style-type: none"> <li>- The wider community and local democracy</li> <li>- Rights and responsibilities</li> <li>- Environmental awareness and sustainability issues</li> </ul> <p>Say No!</p> <ul style="list-style-type: none"> <li>- Feeling safe</li> <li>- Anti bullying</li> <li>- Risk taking behaviour</li> <li>- Medicines</li> </ul>	<p>Money matters</p> <ul style="list-style-type: none"> <li>- Understanding finance and money</li> <li>- Shopping and budgeting</li> <li>- Risk and debt</li> <li>- Goal setting and motivation</li> </ul> <p>Who likes chocolate?</p> <ul style="list-style-type: none"> <li>- Fair trade</li> <li>- Globalisation inequalities</li> <li>- Hunger and poverty</li> <li>- Media and stereotyping</li> </ul>	<p>People around us</p> <ul style="list-style-type: none"> <li>- Global citizenship</li> <li>- Different identities around the world</li> <li>- Challenging prejudice</li> <li>- Support networks – relationships and families</li> </ul> <p>Growing up</p> <ul style="list-style-type: none"> <li>- Managing change</li> <li>- Preparing for transition</li> </ul>
<b>3</b>	<p>We're all stars!</p> <ul style="list-style-type: none"> <li>- Community</li> <li>- Rights and responsibilities</li> <li>- Getting to know each other</li> <li>- Working together</li> </ul> <p>Be friendly, be wise</p> <ul style="list-style-type: none"> <li>- Making and sustaining friendships</li> <li>- Conflict resolution</li> <li>- Anti-bullying</li> <li>- Keeping safe at home and outdoors</li> </ul>	<p>Live long, living strong</p> <ul style="list-style-type: none"> <li>- Health eating and exercise</li> <li>- Goal setting and motivation</li> </ul> <p>Daring to be different</p> <ul style="list-style-type: none"> <li>- Identity and self esteem</li> <li>- Difference and diversity</li> <li>- Peer influence and assertiveness</li> </ul>	<p>Dear diary</p> <ul style="list-style-type: none"> <li>- Comfortable and uncomfortable feelings</li> <li>- Problems in relationships</li> <li>- Anti-bullying</li> <li>- Help and support</li> </ul> <p>Joining in and joining up</p> <ul style="list-style-type: none"> <li>- Needs and responsibilities</li> <li>- Participation</li> <li>- Local democracy</li> <li>- Voluntary groups</li> <li>- Fund raising activities</li> </ul>

<b>4</b>	<p>It's our world</p> <ul style="list-style-type: none"> <li>- The wider community and local democracy</li> <li>- Rights and responsibilities</li> <li>- Environmental awareness and sustainability issues</li> </ul> <p>Say No!</p> <ul style="list-style-type: none"> <li>- Feeling safe</li> <li>- Anti bullying</li> <li>- Risk taking behaviour</li> <li>- Medicines</li> </ul>	<p>Money matters</p> <ul style="list-style-type: none"> <li>- Understanding finance and money</li> <li>- Shopping and budgeting</li> <li>- Risk and debt</li> <li>- Goal setting and motivation</li> </ul> <p>Who likes chocolate?</p> <ul style="list-style-type: none"> <li>- Fair trade</li> <li>- Globalisation inequalities</li> <li>- Hunger and poverty</li> <li>- Media and stereotyping</li> </ul>	<p>People around us</p> <ul style="list-style-type: none"> <li>- Global citizenship</li> <li>- Different identities around the world</li> <li>- Challenging prejudice</li> <li>- Support networks – relationships and families</li> </ul> <p>Growing up</p> <ul style="list-style-type: none"> <li>- Managing change</li> <li>- Preparing for transition</li> </ul>
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<b>Whole school</b>	<p>Rewards and consequences – School Rules</p> <p>Setting up the school council</p> <p>One World Week</p> <p>National Anti-bullying week</p> <p>Road safety week</p> <p>Sustainable development day</p> <p>International children's day</p> <p>Human Rights day</p>	<p>Unicef day of change (6<sup>th</sup> February)</p> <p>Walk to school week</p> <p>Recycling week</p> <p>Holocaust memorial day</p> <p>Martin Luther King day</p> <p>Red Nose day</p> <p>Fairtrade fortnight</p> <p>World Book day</p>	<p>National Children's day</p> <p>Disability awareness day</p> <p>Jeans for Genes day</p> <p>Refugee week</p> <p>World environment day</p> <p>International week</p> <p>My money week</p>