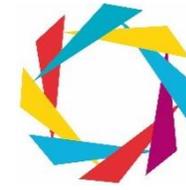


High aspirations - Valuing learning – Achievement for all



Curriculum Vision – Part 6: “The Progression Cogs”

Our children will become enthusiastic and skilful artists, sportspersons, mathematicians, writers, readers, linguists, scientists, musicians, historians, geographers and engineers.

The acquisition, progression and deepening of important skills is outlined within the ‘Progression Cogs’. As pupils advance, their ability to apply skills across subject disciplines and contexts greatly improves.

Part 6 of the Curriculum Vision, “The Progression Cogs”, details the knowledge, understanding and skills progression within each state of being. It is also presented with details of the contextual curriculum. To clarify, Part 5, “Developing the themes and enquires framework”, is presented by year group, whereas this document is presented through the progression within the states of being:

- Readers
- Writers
- Mathematicians
- Scientists
- Geographers
- Historians
- Design Engineers
- Artists*
- Musicians*
- Technologists*
- Sportsman*
- Religiously Conscious*

* Progression documents to be confirmed.

Readers

Year 1 Readers	
Oral	<ul style="list-style-type: none"> • Link what they read or hear to their own experiences • Orally retell known stories, linked to the Y1 range • Recite some simple poems by heart e.g. <i>nursery rhymes, Surrounded by Noise (Ian Souter) The Horseman (Walter de la Mare)</i> • Check that the text makes sense to them as they read and correct inaccurate reading • Read aloud books matched to Y1 phonic knowledge
Grammar	<ul style="list-style-type: none"> • Discuss the meaning of new words by linking to vocabulary they know e.g. <i>unkind = means not kind</i> • Recognise and use predictable phrases in known stories e.g. <i>'I'll huff and I'll puff; once upon a time; happily ever after</i> • Use age appropriate dictionaries to check the meanings of words e.g. <i>picture dictionaries, first dictionaries</i>
Response	<ul style="list-style-type: none"> • Discuss a wide range of poems, stories and non-fiction beyond their independent reading level • Demonstrate their understanding e.g. through role play, story mapping, discussion, drama • Consider the key characteristics of familiar stories e.g. good and evil characters, happy endings, happening in the past • Draw on what they already know to understand a text e.g. through relating to their own experiences (linking learning about penguins to 'Happy Feet') • Make simple predictions based on their own experiences e.g. <i>I think mum will be cross because my mum gets cross</i> • Make simple inferences e.g. <i>I think Red Riding Hood was scared because the wolf was frightening</i>
Organisation & Research	<ul style="list-style-type: none"> • Identify the significance of the title and events in stories e.g. <i>why is this story called 'Where The Wild Things Are?' Why did they make Max king?</i> • Identify the significance of the title and events in non-fiction • Understand that non-fiction texts provide information • Answer questions orally about a shared non-fiction text e.g. <i>what do penguins eat?</i>
Word reading	<ul style="list-style-type: none"> • Apply phonic knowledge and skills to decode words • Correctly and quickly read the graphemes for all 40+ phonemes, including the alternatives taught so far • Accurately blend sounds in unfamiliar words that contain the GPCs that have been taught so far • Read common exception words, noting unusual correspondences between spelling and sound and where these occur in the word • Read words of more than one syllable and those that end in: -s, -es, -ing, -ed, -er and -est • Read words with contractions • Accurately read aloud books that are consistent with their developing phonic knowledge

Year 2 Readers

Oral	<ul style="list-style-type: none"> • Orally retell known stories, linked to the Y2 range • Recite poems by heart, using intonation to make the meaning clear e.g. <i>The Sound Collector</i> (Roger McGough) <i>Walking With My Iguana</i> (Brian Moses) <i>Daddy Fell into the Pond</i> (Noyes) • Read aloud books matched to Y2 phonic knowledge, without overt sounding and blending, when they have been frequently encountered • Participate in discussion about books, poems and other works that are read to them and those that they can read for themselves, taking turns and listening to what others say • Check that the text makes sense to them as they read and correct inaccurate reading
Grammar	<ul style="list-style-type: none"> • Discuss favourite words and phrases • Clarify and discuss the meanings of new words, by linking to vocabulary they know e.g. <i>I think 'kindly' means he spoke in a nice way</i> • Recognise simple, recurring literary language across poetry and narratives e.g. <i>in a land far away; long ago; once there lived; it wasn't long before; they searched far and wide</i> • Use age appropriate dictionaries to check the meanings of words e.g. <i>first dictionaries, infant dictionaries</i>
Response	<ul style="list-style-type: none"> • Discuss their understanding of stories, poems and non-fiction (see range) at a level beyond which they can read independently • Express a single point of view about a text • Draw on what they already know to understand a text e.g. <i>through: the vocabulary, grammar or context; cause and effect (thinking about what's prompted a character's behaviour)</i> • Predict what may happen on the basis of what has been read so far e.g. <i>I think mum will get cross because she told Tom not to lie again</i> • Make inferences on the basis of what is said and done e.g. <i>I think something bad will happen to Hansel and Gretel because they've been left on their own</i>
Organisation & Research	<ul style="list-style-type: none"> • Identify the sequence of events in fiction and how these are related e.g. <i>understanding beginning/middle/end</i> • Identify the sequence of events in non-fiction and how these are related e.g. <i>introductions /conclusions</i> • Use titles, headings, pictures and blurbs to locate relevant information • Use scanning to locate a single piece of information, in response to questions from the teacher • Recognise and understand the structure of the non-fiction texts used • List key information orally or through text marking (highlighting/ underlining) in response to teachers' questions
Word reading	<ul style="list-style-type: none"> • Accurately blend sounds in unfamiliar words, especially recognising alternative sounds e.g. <i>too, chew, shoe, blue</i> • Note unusual correspondences and identify where these occur in the word, in relation to the Y2 common exception words • Read accurately words of two or more syllables • Read words containing common suffixes e.g. <i>-ment, -less, -ful, -ness</i> • Automatically read unfamiliar words accurately and without undue hesitation when reading aloud • Read fluently and confidently in line with the Y2 range

Writers

Y1 Writers (Talk4Writing progression & DfE National Curriculum expectations)						
Text Structure	Sentence Construction	Word Structure / Language	Punctuation	Terminology	Spelling	Handwriting
<p>Consolidate Reception list</p> <p>Introduce: Fiction:</p> <ul style="list-style-type: none"> • Planning Tools: Story map / story mountain (Refer to Story-Type grids) • Plan opening around character(s), setting, time of day and type of weather • Understanding - beginning /middle /end to a story Understanding] • 5 parts to a story: <ul style="list-style-type: none"> ◦ Opening Once upon a time... ◦ Build-up One day... ◦ Problem / Dilemma Suddenly.../ Unfortunately,... ◦ Resolution Fortunately,... ◦ Ending Finally,.... <p>Consolidate Non-fiction:</p> <ul style="list-style-type: none"> • Planning tools: text map / washing line • Heading • Introduction Opening factual statement • Middle section(s) Simple factual sentences around a them • Bullet points for instructions • Labelled diagrams • Ending Concluding sent 	<p>Consolidate Reception list</p> <ul style="list-style-type: none"> • (See Connectives and Sentence Signposts doc.) Introduce: Types of sentences: Statements Questions Exclamations • Simple Connectives: and or but so because so that then that while when where • Also as openers: While... When... Where... -'ly' openers Fortunately,...Unfortunately, Sadly,.... Simple sentences e.g. I went to the park. The castle is haunted. Embellished simple sentences • Using adjectives e.g. The giant had an enormous beard. Red squirrels enjoy eating delicious nuts. • Compound sentences using connectives (coordinating conjunctions) and/or/ but/so e.g. The children played on the swings and slid down the slide. Spiders can be small or they can be large. Charlie hid but Sally found him. It was raining so they put on their coats. Complex sentences: Use of 'who' (relative clause) e.g. Once upon a time there was a little old woman who lived in a forest. There are many children who like to eat ice cream. • 'Run' - Repetition for rhythm e.g. He walked and he walked and he walked. • Repetition for description e.g. a lean cat, a mean cat a green dragon, a fiery dragon 	<p>Consolidate Reception list</p> <p>Introduce:</p> <ul style="list-style-type: none"> • Prepositions: <i>inside outside towards across under</i> • Determiners: <i>the a my your an this that his her their some all lots of many more those these</i> • Adjectives to describe e.g. <i>The old house... The huge elephant... dangerous dragon slimy snake</i> • Similes using as...as... e.g. as tall as a house as red as a radish • Precise, clear language to give information e.g. <i>First, switch on the red button. Next, wait for the green light to flash...</i> • Regular plural noun suffixes -s or -es (e.g. dog, dogs; wish, wishes) • Suffixes that can be added to verbs (e.g. helping, helped, helper) • How the prefix un- changes the meaning of verbs and adjectives (negation, e.g. unkind, or undoing, e.g. untie the boat) 	<p>Consolidate Reception list</p> <p>Introduce:</p> <ul style="list-style-type: none"> • Capital Letters: Capital letter for names • Capital letter for the personal pronoun I • Full stops • Question marks • Exclamation marks • Speech bubble • Bullet point 	<p>Consolidate:</p> <ul style="list-style-type: none"> • Finger spaces • Letter • Word • Sentence • Full stops • Capital letter • Simile – 'like' <p>Introduce:</p> <ul style="list-style-type: none"> • Punctuation • Question mark Exclamation mark* • Speech bubble • Bullet points • Singular/ plu 	<ul style="list-style-type: none"> • spell the Y1 common exception words (appendix 1 in NC) • spell words containing each of the 40+ phonemes already taught • spell days of the week • names the letters of the alphabet in order • use letter sounds to distinguish between alternate spellings of the same sound • spell verbs ending in -ing, -ed and -er • spell words containing the range of Y1 phonemes • spell adjectives ending in -er and -est • spell words using the prefix un- • Can use -s or -es for the third person singular marker for verbs • spell plural nouns by adding -s and -es • write from memory simple sentences dictated by the teacher that include words using the GPCs and common exception words 	<p>Consolidate:</p> <ul style="list-style-type: none"> • Sit correctly at the table, holding a pencil comfortably and correctly • Begin to form lower-case letters in the correct direction, starting and finishing in the right place • Form all capital letters correctly • Form all digits 0 - 9 correctly • Leave spaces between words • Understand which letters belong to which family (e.g. tall letters, long letters). <p>Introduce:</p> <ul style="list-style-type: none"> • Form correctly sized and orientated lower-case letters, capital letters and digits • Start using some of the diagonal and horizontal strokes needed to join letters and understand which letters are best left un-joined • Use spacing between words that reflects the size of the letters

Year 2 Writers
(Talk4Writing progression & DfE National Curriculum expectations)

Text Structure	Sentence Construction	Word Structure / Language	Punctuation	Terminology	Spelling	Handwriting
<ul style="list-style-type: none"> Consolidate Year 1 list <p>Introduce: Fiction</p> <ul style="list-style-type: none"> Secure use of planning tools: Story map / story mountain / story grids/ 'Boxing-up' grid Plan opening around character(s), setting, time of day and type of weather Understanding 5 parts to a story with more complex vocabulary <ul style="list-style-type: none"> Opening eg <i>In a land far away</i> Build-up eg <i>Later that day</i> Problem / Dilemma <i>To his amazement</i> Resolution eg <i>As soon as</i> Ending eg <i>Luckily, Fortunately,</i> Ending should be a section rather than one final sentence <p>Non-Fiction</p> <p>Introduce:</p> <ul style="list-style-type: none"> Secure use of planning tools: Text map / washing line / 'Boxing-up' grid Introduction: <ul style="list-style-type: none"> Heading Hook to engage Factual statement Opening question <p>Middle section(s)</p> <p>Group related ideas / facts into sections</p> <p>Sub headings to introduce sentences /sections</p> <p>Use of lists – what is needed / lists of steps to be taken/ Bullet points for facts</p> <p>Diagrams</p> <p>Ending</p> <p>Make final comment to reader</p> <p>Extra tips! / Did-you-</p>	<ul style="list-style-type: none"> Consolidate Year 1 list <p>Introduce: (See Connectives and Sentence Signposts doc)</p> <ul style="list-style-type: none"> Types of sentences: Statements, Questions, Exclamations, Commands '-ly' starters eg <i>Usually, Eventually, Finally, Carefully, Slowly, ...</i> Vary openers to sentences Embellished simple sentences using: <ul style="list-style-type: none"> adjectives eg <i>The boys peeped inside the dark cave.</i> adverbs eg <i>Tom ran quickly down the hill.</i> Secure use of compound sentences (Coordination) using connectives: <i>and/ or / but / so</i> (coordinating conjunctions) Complex sentences (Subordination) using: <ul style="list-style-type: none"> Drop in a relative clause: <i>who/which</i> eg <i>Sam, who was lost, sat down and cried.</i> Additional subordinating conjunctions: <i>what/while/when/where/ because/ then/so that/ if/to/until</i> eg <i>While the animals were munching breakfast, two visitors arrived.</i> Use long and short sentences: Long sentences to add description or information. Use short sentences for emphasis. Expanded noun phrases eg <i>lots of people, plenty of food</i> List of 3 for description eg <i>He wore old shoes, a dark cloak and a red hat.</i> 	<ul style="list-style-type: none"> Consolidate Year 1 list <p>Introduce:</p> <ul style="list-style-type: none"> Prepositions: <i>behind above along before between after</i> Alliteration eg <i>wicked witch</i> Similes using ... like ... <i>... like sizzling sausages ...hot like a fire</i> Two adjectives to describe the noun <i>The scary, old woman ...</i> Adverbs for description <i>Snow fell gently and covered the cottage in the wood.</i> Adverbs for information <i>Lift the pot carefully onto the tray.</i> Generalisers for information, <i>Most dogs ... Some cats ...</i> Formation of nouns using suffixes such as <i>-ness, -er</i> Formation of adjectives using suffixes such as <i>-ful, -less</i> (A fuller list of suffixes can be found in the spelling appendix.) Use of the suffixes <i>-er</i> and <i>-est</i> to form comparisons of adjectives and adverbs 	<ul style="list-style-type: none"> Consolidate Year 1 list <p>Introduce:</p> <ul style="list-style-type: none"> Demarcate sentences: Capital letters Full stops Question marks Exclamation marks Commas to separate items in a list Comma after <i>-ly</i> opener <i>Fortunately, ... Slowly, ...</i> Speech bubbles /speech marks for direct speech Apostrophes to mark contracted forms in spelling <i>don't, can't</i> Apostrophes to mark singular possession eg <i>the cat's name</i> 	<p>Consolidate:</p> <ul style="list-style-type: none"> Punctuation <ul style="list-style-type: none"> Finger spaces Letter Word Sentence Full stops Capital letter Question mark Exclamation mark Speech bubble Bullet points Singular/ plural <ul style="list-style-type: none"> Adjective Verb Conjunction Connective Alliteration Simile – 'as' / 'like' <p>Introduce:</p> <ul style="list-style-type: none"> Apostrophe (contractions and singular possession) Commas for description 'Speech marks' Suffix Verb / adverb Statement question exclamation Command (Bossy verbs) Tense (past, present, future) ie not in bold Adjective / noun Noun phrases Generalisers 	<ul style="list-style-type: none"> Can spell the Y2 common exception words and homophones Segmenting spoken words into phonemes and representing these by graphemes, spelling many correctly Learning new ways of spelling phonemes for which one or more spellings are already known, and learn some words with each spelling, including a few common homophones Learning to spell more words with contracted forms Distinguishing between homophones and near-homophones Learning the possessive apostrophe (singular) [for example, the girl's book] Add suffixes to spell longer words, including <i>-ment, -ness, -ful, -less, -ly</i> Can spell words using Y2 suffixes and rules for plurals Write from memory simple sentences dictated by the teacher that include words using the GPCs, common exception words and punctuation taught so far. Can spell words containing the range of Y2 phonemes 	<ul style="list-style-type: none"> Form correctly sized and orientated lower-case letters, capital letters and digits Start using some of the diagonal and horizontal strokes needed to join letters and understand which letters are best left un-joined Use spacing between words that reflects the size of the letters

<p>know? facts / True or false?</p> <p>The consistent use of present tense versus past tense throughout texts</p> <p>Use of the continuous form of verbs in the present and past tense to mark actions in progress (e.g. <i>she is drumming</i>, <i>he was shouting</i>)</p>						
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Mathematicians

Year 1 Mathematicians						
Number and Place Value	Addition and Subtraction	Multiplication and Division	Fractions (inc decimals and percentages)	Measurement	Geometry – Properties of Shapes	Geometry – Position and Direction
<p>Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number</p> <p>Count, read and write numbers to 100 in numerals; count in multiples of twos, threes, fives and tens</p> <p>Given a number, identify one more and one less</p> <p>Use the language of: equal to, more than, less than (fewer), most, least</p> <p>Identify and represent numbers using objects and pictorial representations including the number line read and write numbers from 1 to 20 in numerals and words.</p>	<p>Represent and use number bonds and related subtraction facts within 20</p> <p>Add and subtract one-digit and two-digit numbers to 20, including zero</p> <p>Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs</p> <p>Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$</p>	<p>Count in multiples of twos, fives and tens</p> <p>Solve one-step Problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher</p>	<p>Recognise, find and name a half as one of two equal parts of an object, shape or quantity</p> <p>Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.</p>	<p>Compare, describe and solve practical problems for:</p> <p>lengths and heights [e.g. long/short, longer/shorter, tall/short, double/half]</p> <p>mass/weight [e.g. heavy/light, heavier than, lighter than]</p> <p>capacity and volume [e.g. full/empty, more than, less than, half, half full, quarter]</p> <p>time [e.g. quicker, slower, earlier, later]</p> <p>Sequence events in chronological order using language [e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]</p> <p>Recognise and know the value of different denominations of coins and notes</p> <p>Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. On analogue clock.</p> <p>Recognise and use language relating to dates, including days of the week, weeks, months and years</p>	<p>Recognise and name common 2-D and 3-D shapes, including:</p> <ul style="list-style-type: none"> * 2-D shapes [e.g. rectangles (including squares), circles and triangles] * 3-D shapes [e.g. cuboids (including cubes), pyramids and spheres]. <p>Begin to relate solid shapes to pictures of them.</p>	<p>Describe position, direction and movement, including half, quarter and three-quarter turns.</p>
Statistics		Ratio and Proportion			Algebra	
No detailed objectives		No detailed objectives			No detailed objectives	

Year 2 Mathematicians

Number and Place Value	Addition and Subtraction	Multiplication and Division	Fractions (inc decimals and percentages)	Measurement	Geometry – Properties of Shapes	Geometry – Position and Direction
<p>Pupils should be taught to:</p> <p>Count in steps of 2,3 and 5 from 0 and in tens from any number, forward and backward</p> <p>Recognise the value of each digit in a two-digit number (tens, ones)</p> <p>Identify, represent and estimate numbers using different representations, including the number line</p> <p>Compare and order numbers from 0 up to 100; use <, > and = signs</p> <p>Read and write numbers to at least 100 in numerals and in words</p> <p>Use place value and number facts to solve problems.</p>	<p>Solve problems with addition and subtraction:</p> <p>Using concrete objects and pictorial representations, including those involving numbers, quantities and measures.</p> <p>Applying their increasing knowledge of mental and written methods</p> <p>Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100</p> <p>Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two -digit number and ones a two -digit number and tens two two -digit numbers -digit numbers Adding three one digit numbers</p> <p>Show that addition can be done in any order (commutative) and subtraction of one number from another cannot Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.</p>	<p>Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</p> <p>Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals (=) signs</p> <p>Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot</p> <p>Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts</p>	<p>Recognise, find, name and write fractions $1/3$, $1/4$, $2/4$ and $3/4$ of a length, shape, set of objects or quantity</p> <p>Write simple fractions e.g. $1/2$ of 6 = 3 and recognise the equivalence of two quarters and one half.</p>	<p>Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ($^{\circ}\text{C}$); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels</p> <p>Compare and order lengths, mass, volume/capacity and record the results using >, < and =</p> <p>Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value</p> <p>Find different combinations of coins that equal the same amounts of money</p> <p>Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change compare and sequence intervals of time</p> <p>Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times. Know the number of minutes in an hour and the number of hours in a day</p>	<p>Identify and describe the properties of 2-D shapes, including the number of sides and symmetry in a vertical line</p> <p>Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces</p> <p>Identify 2-D shapes on the surface of 3-D shapes, for example a circle on a cylinder and a triangle on a pyramid</p> <p>Compare and sort common 2-D and 3-D shapes and everyday objects</p>	<p>Order and arrange combinations of mathematical objects in patterns</p> <p>Use mathematical vocabulary to describe position, direction and movement, including distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise), and movement in a straight line.</p>
Statistics					Ratio and Proportion	Algebra
<p>Interpret and construct simple pictograms, tally charts, block diagrams and simple tables</p> <p>Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity</p> <p>Ask and answer questions about totalling and compare categorical data.</p>					No detailed objectives	No detailed objectives

Scientists

Year 1 Scientists	
Working Scientifically	<ul style="list-style-type: none"> • 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 & ideas to suggest answers to questions • gathering and recording data to help in answering questions
Plants	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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
Everyday materials	<ul style="list-style-type: none"> • 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
Seasonal changes	<ul style="list-style-type: none"> • observe changes across the four seasons • observe and describe weather associated with the seasons and how day length varies.

Year 2 Scientists	
Working Scientifically	<ul style="list-style-type: none"> • 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 & ideas to suggest answers to questions • gathering and recording data to help in answering questions
Living things and their habitats	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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
Everyday materials	<ul style="list-style-type: none"> • 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

Geographers

Year 1 Geographers	
Locational knowledge	<ul style="list-style-type: none"> Name, locate and identify characteristics of the four countries and capital cities of the United Kingdom and its surrounding seas
Human & Physical Geography	<ul style="list-style-type: none"> Use basic geographical vocabulary to refer to: key physical features, including: beach, cliff, coast, sea, ocean and river, 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
Geographical skills & fieldwork	<ul style="list-style-type: none"> Use basic geographical vocabulary to refer to: key human features: <i>farm, port, harbour</i> Use basic geographical vocabulary to refer to: key human features: <i>city, town, village, factory, house, office</i> use simple compass directions (North, South, East and West) and locational and directional language 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

Year 2 Geographers	
Locational knowledge	<ul style="list-style-type: none"> Name and locate the world's seven continents and five oceans 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
Place knowledge	<ul style="list-style-type: none"> 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 & Physical Geography	<ul style="list-style-type: none"> Use basic geographical vocabulary to refer to: key physical features, including: , forest, hill, mountain, river, soil, valley, vegetation, season and weather
Geographical skills & fieldwork	<ul style="list-style-type: none"> Use basic geographical vocabulary to refer to: key human features: <i>farm, port, harbour</i> Use basic geographical vocabulary to refer to: key human features: <i>city, town, village, factory, house, office</i> use simple compass directions (N,E,S,W) & locational and directional language 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 & 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

Historians

	Early Years	Key Stage 1	Key Stage 2
1) knowledge / understanding (including characteristic features of periods)	Use everyday language related to time Order and sequence familiar events Describe main story settings, events and principal characters. Talk about past and present events in their own lives and in lives of family members.	Develop an awareness of the past Use common words and phrases relating to the passing of time Know where all people/events studied fit into a chronological framework Identify similarities / differences between periods	Continue to develop chronologically secure knowledge of history Establish clear narratives within and across periods studied Note connections, contrasts and trends over time
2) Historical terms e.g. empire, peasant	Extend vocabulary, especially by grouping and naming, exploring meaning and sounds of new words.	Use a wide vocabulary of everyday historical terms	Develop the appropriate use of historical terms
3) Historical enquiry - Using evidence / Communicating ideas	Be curious about people and show interest in stories Answer 'how' and 'why' questions ... in response to stories or events. Explain own knowledge and understanding, and asks appropriate questions. Know that information can be retrieved from books and computers Record, using marks they can interpret and explain	Ask and answer questions * Understand some ways we find out about the past Choose and use parts of stories and other sources to show understanding (of concepts in part 5 below)	Regularly address and sometimes devise historically valid questions * Understand how knowledge of the past is constructed from a range of sources Construct informed responses by ... Selecting and organising relevant historical information
4) Interpretations of history		Identify different ways in which the past is represented	Understand that different versions of the past may exist, giving some reasons for this
5. Questions relate to these key concepts that underpin all historical enquiry, developed through regular re-visiting in a range of contexts			
5a) Continuity and change in and between periods	Look closely at similarities, differences, patterns and change Develop understanding of growth, decay and changes over time	Identify similarities / differences between ways of life at different times	Describe / make links between main events, situations and changes within and across different periods/societies
5b) Cause and consequence	Question why things happen and give explanations	Recognise why people did things, why events happened and what happened as a result	Identify and give reasons for, results of, historical events, situations, changes
5c) Similarity / Difference within a period/situation (diversity)	Know about similarities and differences between themselves and others, and among families, communities and traditions	Make simple observations about different types of people, events, beliefs within a society	Describe social, cultural, religious and ethnic diversity in Britain & the wider world
5d) Significance of events / people	Recognise and describe special times or events for family or friends	Talk about who was important eg in a simple historical account	Identify historically significant people and events in situations

This resource has been developed following guidance from membership to the Historical Association.

Design Engineers

	Key Stage 1	Key Stage 2 - Lower	Key Stage 2 - Upper
Designing Understanding contexts, users and purposes	<ul style="list-style-type: none"> work confidently within a range of contexts, such as imaginary, story-based, home, school, gardens, playgrounds, local community, industry and the wider environment state what products they are designing and making say whether their products are for themselves or other users describe what their products are for say how their products will work say how they will make their products suitable for their intended users use simple design criteria to help develop their ideas 	<ul style="list-style-type: none"> work confidently within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment describe the purpose of their products indicate the design features of their products that will appeal to intended users explain how particular parts of their products work 	<ul style="list-style-type: none"> carry out research, using surveys, interviews, questionnaires and web-based resources identify the needs, wants, preferences and values of particular individuals and groups develop a simple design specification to guide their thinking
		<ul style="list-style-type: none"> gather information about the needs and wants of particular individuals and groups develop their own design criteria and use these to inform their ideas 	
Designing Generating, developing, modelling and communicating ideas	<ul style="list-style-type: none"> generate ideas by drawing on their own experiences use knowledge of existing products to help come up with ideas develop and communicate ideas by talking and drawing model ideas by exploring materials, components and construction kits and by making templates and mock-ups use information and communication technology, where appropriate, to develop and communicate their ideas 	<ul style="list-style-type: none"> share and clarify ideas through discussion model their ideas using prototypes and pattern pieces use annotated sketches, cross-sectional drawings and exploded diagrams to develop and communicate their ideas use computer-aided design to develop and communicate their ideas 	<ul style="list-style-type: none"> generate innovative ideas, drawing on research make design decisions, taking account of constraints such as time, resources and cost
		<ul style="list-style-type: none"> generate realistic ideas, focusing on the needs of the user make design decisions that take account of the availability of resource 	
Making Planning	<ul style="list-style-type: none"> plan by suggesting what to do next select from a range of tools and equipment, explaining their choices select from a range of materials and components according to their characteristics 	<ul style="list-style-type: none"> select tools and equipment suitable for the task explain their choice of tools and equipment in relation to the skills and techniques they will be using select materials and components suitable for the task explain their choice of materials and components according to functional properties and aesthetic qualities 	<ul style="list-style-type: none"> produce appropriate lists of tools, equipment and materials that they need formulate step-by-step plans as a guide to making
		order the main stages of making	
Making Practical skills and techniques	<ul style="list-style-type: none"> follow procedures for safety and hygiene use a range of materials and components, including construction materials and kits, textiles, food ingredients and mechanical components measure, mark out, cut and shape materials and components assemble, join and combine materials and components use finishing techniques, including those from art and design 	<ul style="list-style-type: none"> allow procedures for safety and hygiene use a wider range of materials and components than KS1, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components 	<ul style="list-style-type: none"> accurately measure, mark out, cut and shape materials and components accurately assemble, join and combine materials and components accurately apply a range of finishing techniques, including those from art and design use techniques that involve a number of steps demonstrate resourcefulness when tackling practical problem
		<ul style="list-style-type: none"> measure, mark out, cut and shape materials and components with some accuracy assemble, join and combine materials and components with some accuracy apply a range of finishing techniques, including those from art and design, with some accuracy 	
Evaluating Own ideas and products	<ul style="list-style-type: none"> talk about their design ideas and what they are making make simple judgements about their products and ideas against design criteria suggest how their products could be improve 	<ul style="list-style-type: none"> identify the strengths and areas for development in their ideas and products consider the views of others, including intended users, to improve their work 	<ul style="list-style-type: none"> critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make evaluate their ideas and products against their original design specification
		<ul style="list-style-type: none"> refer to their design criteria as they design and make use their design criteria to evaluate their completed products 	
Evaluating Existing products	<ul style="list-style-type: none"> what products are who products are for what products are for how products work how products are used where products might be used what materials products are made from what they like and dislike about prod 	Investigate and analyse: <ul style="list-style-type: none"> how well products have been designed how well products have been made why materials have been chosen what methods of construction have been used how well products work how well products achieve their purposes how well products meet user needs and wants 	Investigate and analyse: <ul style="list-style-type: none"> how much products cost to make how innovative products are how sustainable the materials in products are what impact products have beyond their intended purpose
		Investigate and analyse: <ul style="list-style-type: none"> who designed and made the products where products were designed and made when products were designed and made whether products can be recycled or reused 	

Evaluating Key events and individuals	No KS1 requirement	<ul style="list-style-type: none"> • about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products 	
Technical Knowledge Making products work	<ul style="list-style-type: none"> • about the simple working characteristics of materials and components • about the movement of simple mechanisms such as levers, sliders, wheels and axles • how freestanding structures can be made stronger, stiffer and more stable • that a 3-D textiles product can be assembled from two identical fabric shapes • that food ingredients should be combined according to their sensory characteristics • the correct technical vocabulary for the projects they are undertaking 	<ul style="list-style-type: none"> • how to use learning from science to help design and make products that work • how to use learning from mathematics to help design and make products that work • that materials have both functional properties and aesthetic qualities • that materials can be combined and mixed to create more useful characteristics • that mechanical and electrical systems have an input, process and output • the correct technical vocabulary for the projects they are undertaking 	
		<ul style="list-style-type: none"> • how mechanical systems such as levers and linkages or pneumatic systems create movement • how simple electrical circuits and components can be used to create functional products • how to program a computer to control their products • how to make strong, stiff shell structures • that a single fabric shape can be used to make a 3D textiles product • that food ingredients can be fresh, pre-cooked and processed 	<ul style="list-style-type: none"> • how mechanical systems such as cams or pulleys or gears create movement • how more complex electrical circuits and components can be used to create functional products • how to program a computer to monitor changes in the environment and control their products • how to reinforce and strengthen a 3D framework • that a 3D textiles product can be made from a combination of fabric shapes • that a recipe can be adapted by adding or substituting one or more ingredients
Cooking and nutrition Where food comes from	<ul style="list-style-type: none"> • that all food comes from plants or animals • that food has to be farmed, grown elsewhere (e.g. home) or caught 	<ul style="list-style-type: none"> • that a recipe can be adapted a by adding or substituting one or more ingredients • that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world 	
		<ul style="list-style-type: none"> • that seasons may affect the food available • how food is processed into ingredients that can be eaten or used in cooking 	
Cooking and nutrition Food preparation, cooking and nutrition	<ul style="list-style-type: none"> • how to name and sort foods into the five groups in the Eatwell Guide • that everyone should eat at least five portions of fruit and vegetables every day • how to prepare simple dishes safely and hygienically, without using a heat source • how to use techniques such as cutting, peeling and grating 	<ul style="list-style-type: none"> • how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source • how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking 	
		<ul style="list-style-type: none"> • that a healthy diet is made up from a variety and balance of different food and drink, as depicted in the Eatwell Guide • that to be active and healthy, food and drink are needed to provide energy for the body 	<ul style="list-style-type: none"> • that recipes can be adapted to change the appearance, taste, texture and aroma • that different food and drink contain different substances – nutrients, water and fibre – that are needed for health

This resource has been developed following guidance from membership to the Design Technology Association.