



Year 6 *Online Safety threads through every topic						
Science & Foundation Curriculum						
Topic →	Revolution	Hola Mexico	ID & Blood Heart	Biomes and Globalisation	Pharaohs	Charles Darwin
Local Links	Burwell House (Victorian Day) Ely Huntingdon Gaol	Museum of Archaeology and Anthropology	Royal Papworth Hospital	Botanical Gardens	Cambridge Fitzwilliam Museum	Christ's College Cambridge
Science	Electricity	Light	Animals including humans	Living things and their habitats	Evolution and inheritance	Evolution and inheritance
Art & Design	Draw	Textiles (Weaving)	Print Digital	Sculpt Paint	Mould Collage	Draw / Paint Textiles (dye fabrics)
Computing*	Online safety Understanding technology	Online safety Digital literacy	Online safety Programming	Online safety Programming	Online safety Digital literacy	Online safety Understanding technology
D&T	Construction and mechanics Electrical and electronics	Food Textiles (stitching techniques)	Materials	Computing Food	Materials	Materials
Geography	Industrial areas Third world and developed countries	Using technology	Ordnance survey maps	Using technology Deserts and other biomes	Deserts (and other biomes)	Ordnance survey maps
History	British history: changes in social history linked to crime & punishment	Mayan civilisation	Significant figure: Christiaan Barnard History of diseases, infections and grave robbing	History of globalisation and migration patterns	Ancient Egypt	Significant individuals – Charles Darwin and Mary Anning
Music	History of music: Romantic period	Listening and reviewing (La Cucaracha and El Jarabe Tapatio)	Listening and reviewing (Coldplay) Performing	Improvising and composing	Listening and reviewing (Sebastian Bach) Improvising and composing	Performing Listening and reviewing
PE	Outdoor & adventurous activities Gymnastics	Invasion games: hockey Dance	Invasion games: tag rugby Physical challenges: circuits	Dance Net & wall: tennis	Striking & fielding: cricket Swimming	Athletics Swimming
PSHE	What will change as we become more independent?	How can we keep healthy as we grow?	How do friendships change as we grow?	How can the media influence people?	What will change as we become more independent?	How can we keep healthy as we grow?
RE	What does it mean to be a Buddhist?	Christians in other parts of the world	Christians in other parts of the world	How can I build a more respectable Caldecote?	What can we learn from Jesus?	What are the different views on how our world began?
Spanish	School life	School life	Healthy lifestyles	Celebrations	Sports	Sports



Character Education - Year 6

Every Caldecote pupil will:

- Be responsible for the upkeep of a raised bed in the 'garden' along with their class
- Have a chance to 'dress up' for a special occasion at least once every year
- Prepare some food and then eat it as part of a celebration
- Perform in front of your class at least once every year
- Tell your class about your favourite character from a book
- Take part in a performance in the hall
- Compete in a whole school sporting competition at least once a year

"11 by 11" by the age of 11 years each Year 6 pupil will:

- Share your letters from Year 3
- Keep a diary for a week
- Send an email to an official body
- Vote in a school election
- Interview someone
- Find out about a local charity and how you can support them
- Design a product or business idea and pitch it to get it chosen for the £5 challenge
- Make a dessert or bake a cake and organise a tea party for your parents
- See the sun set
- Plan and go on a visit to a place in Cambridge using public transport
- Apply and commit to job within school



Readers - Year 6

Decoding	Skim and scan texts to get the general idea of the content of a piece. Read with fluency and understanding.	Inference	Search for simple clues within the text to support 'reading between the lines' Uses clues from action, dialogue and description to interpret meaning. Explain and justify inferences, providing evidence from the text to support reasoning
Range of Reading	Can persevere with challenging texts (whole texts, including novels) to read with fluency, understanding and expression Can compare, contrast and evaluate different texts.	Prediction	Make predictions about characters including how their behaviour may/may not change and how they may/may not appeal to the reader, justifying answers with reference to the text.
Familiarity of texts.	Provide straightforward explanations for the purpose of the language, structure and presentation of texts. Answer who, what, why, where, when, which, how questions, using direct reference to and quotes from the text.	Authorial Intent	Identify a range of figurative language e.g. metaphor, simile, alliteration, idioms, euphemism, personification etc. Comment upon the use and effect of the author's language on the reader.
Poetry and Performance	Prepare poems and plays to read aloud and to perform, showing understanding through intonation, tone and volume so that the meaning is clear to an audience.	Non-Fiction	Identify whether statements from a text are fact or opinion. Accurately and selectively summarise main ideas, events, and information from non-fiction.
Word Meanings	Talk about a growing repertoire of vocabulary and know how to independently find out what unknown words in text mean.	Discussing Reading	Identify/explain how the sequence of events in narrative fiction contributes to meaning as a whole. Find and discuss evidence of themes and conventions in different genres and forms of text.
Understanding	Understand that authors write about specific issues to elicit questions from the reader. Identify the main theme in a text, as well as subsidiary themes.	Accelerated Reader	Star reader test termly to set book range and targets which are monitored weekly



Year 6 Reading Assessment

Statements in bold are from the K2 AF

Decoding	I can skim and scan texts to get the general idea of the content of a piece. I can read with fluency and understanding. I can read aloud and understand the meaning of ALL the words on the Year 5/6 list.	Inference	I can explain and justify inferences, providing evidence from the text to support reasoning. I can search for simple clues within the text to support 'reading between the lines' I can use clues from action, dialogue and description to interpret meaning.
Range of Reading	I can read age-appropriate books with confidence and fluency (including whole novels) I can read, enjoy, understand and discuss books that are written by different authors, in different styles. I can persevere with challenging texts (whole texts, including novels) to read with fluency, understanding and expression. I can compare, contrast and evaluate different texts.	Prediction	I can predict what might happen from details stated and implied. I can make predictions about characters including how their behaviour may/may not change and how they may/may not appeal to the reader, justifying answers with reference to the text.
Familiarity of texts.	I can make comparisons within and across books. I can provide straightforward explanations for the purpose of the language, structure and presentation of texts. I can answer who, what, why, where, when, which, how questions, using direct reference to and quotes from the text.	Authorial Intent	I can evaluate how authors use language, including figurative language e.g. metaphor, simile, alliteration, idioms, euphemism, personification etc., considering the impact on the reader. I can understand that authors write about specific issues to elicit questions from the reader. I can find extracts of evidence to show how an author uses cohesive techniques.
Poetry and Performance	I can read aloud with intonation that shows understanding. I can read, understand and learn from a wide range of poetry, and can learn longer poems by heart showing understanding through intonation, tone and volume so that the meaning is clear to an audience. I can show my understanding of texts and poems through presentations and debates. I can present information using notes I have created to help me focus on the topic in my presentation.	Non-Fiction	I can retrieve information from non-fiction texts. I can identify whether statements from a text are fact or opinion. I can accurately and selectively summarise main ideas, events, and information from non-fiction.
Word Meanings	I can work out the meaning of words from the context. I can talk about a growing repertoire of vocabulary and know how to independently find out what unknown words in text mean. I can show my understanding of texts by summarising the main ideas over a paragraph or a number of paragraphs, finding key details as evidence to support my views. I can understand how language, structure and presentation contribute to the meaning of a text.	Discussing Reading	I can find and discuss evidence of themes and conventions in different genres and forms of text. I can discuss ideas, events, structures, issues, characters and plots of the texts across a wide range of writing.
Understanding	I can summarise main ideas, identifying key details and using quotations for illustration. I can identify the main theme in a text, as well as subsidiary themes.	AR	Pupils in KS2 use the accelerated reader programme. They have star reader tests followed by close monitoring of the AR numbered books.



Writing - Year 6			
Transcription		Composition	
Handwriting	Spelling	Vocabulary, grammar and punctuation	Structure and purpose
<p>Evidence:</p> <ul style="list-style-type: none"> -Writing is legible and fluent. (Quality may not be maintained at speed.) -Correct choice is made about whether to join handwriting or print letters e.g. to label a diagram. 	<p>Sufficient evidence shows the ability to...</p> <ul style="list-style-type: none"> -Write from memory, dictated sentences which include words and punctuation from the ks2 curriculum. -Use knowledge of morphology to spell words with the full range of prefixes and suffixes in the YR 5-6 spelling appendix e.g. pre-, re-, -able, -ible, -ably, -ibly, -al, -ial. -Use the appropriate range of spelling rules and conventions to spell polysyllabic words which conform to regular patterns. -Spell some challenging homophones from the YR 5-6 spelling appendix. -Spell the majority of words from the YR 5-6 statutory word list. 	<p>Sufficient evidence shows the ability to...</p> <ul style="list-style-type: none"> -Write a range of sentence structures (simple and complex) including relative clauses e.g. using 'that', 'which'. -Use a wide range of punctuation including brackets and dashes; commas for pauses; colons and semi-colons for lists; hyphens; consistent use of bullet points. -Use modal verbs to indicate degrees of possibility. -Maintain correct tense; also control perfect form of verbs e.g. He has collected some shells. Understand and use active and passive voice. Identify the subject and object. -Identify synonym and antonym. -Select vocabulary and grammar to suit formal and informal writing. -Use vocabulary which is varied, interesting and precise. -Use a dictionary and thesaurus to define words and expand vocabulary. 	<p>Sufficient evidence shows the ability to...</p> <ul style="list-style-type: none"> -Discuss and develop ideas; routinely use the drafting process before and during writing. -Adapt form and style to suit purpose and audience; draw appropriate features from models of similar writing. -Use paragraphs to develop and expand some ideas in depth; add detail within each paragraph; coverage may not always be even. -Use a range of devices to link ideas within and across paragraphs e.g. adverbials or repetition of a phrase. -Use a range of presentational devices, including use of bullet points, tables and columns, to guide the reader. Integrate dialogue to convey character and advance the action. -Describe characters, settings and atmosphere, with some precision. - Summarise longer passages, when required. -Evaluate own and others' writing; proof read, edit and revise



Year 6 writers should be able to			
Aspect	Autumn	Spring	Summer
Handwriting	Consistently use cursive joined handwriting where letters are all of a consistent size and accurately formed		
Composition	Use a thesaurus to develop word understanding and build a bank of antonyms and synonyms Adapt the grammar and vocabulary used in their writing to suit the audience and purpose# Use paragraphs correctly so that each one has a clear topic, and has a signal of change in time, place or event	Create atmosphere and describe settings and use antonyms and synonyms to enhance description Describe and integrate dialogue to convey character and advance the action Add detail to their writing by using expanded noun phrases to add precision, detail and qualification	Show that their second drafts reflect their evaluative and reflective thinking which is evidenced by thoughtful and effective changes made to create effects and to impact on the reader Evaluate their writing as a matter of course and proof read to ensure a high level of accuracy
Grammar	Use the correct tense throughout a piece of writing Use modal verbs appropriately to suggest degrees of possibility Add precision, detail and qualification using prepositional phrases and adverbs Effectively draft their work so that they enhance meaning and adapt grammar choices for effect	Use a range of cohesive devices including adverbials, within and across sentences and paragraphs Ensure correct subject verb agreement in singular and plural Use a wide range of clause structures, sometimes varying their position with the sentence Use structures typical of very formal speech	Use modal verbs and adverbs to position an argument as well as indicate degrees of possibility probability and certainty Use a range of verb forms to create more subtle meanings Use the passive voice to present information with a different emphasis Make imaginative vocabulary choices and use words precisely and appropriately to create impact and enhance meaning
Punctuation	Use commas accurately to mark phrases and clauses and to help with clarity	Use a range of further punctuation correctly across a range of writing Use punctuation for parenthesis correctly	



Spelling	<p>Proof read and edit work using a range of checking strategies</p> <p>Use the correct form of each homophone</p> <p>Spell complex words with silent letters</p>	Change verbs into nouns by adding suffixes	Spell all the words of the Y5 & 6 list
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Maths - Year 6				
Number and place value	<ul style="list-style-type: none"> •Positive integers •Negative numbers •Numbers to 10million 	Addition & subtraction	<ul style="list-style-type: none"> •Addition and subtraction of numbers of any size •Calculating with decimals 	<p>Calculation</p> <p>Pupils consolidate these strategies and choose the most efficient methods for their calculation in Y6</p> <ul style="list-style-type: none"> • Column addition and subtraction • Bar modelling • Short multiplication • Short division 'bus stop' method • Rounding, estimation and inverse to check calculations
Multiplication and Division	<ul style="list-style-type: none"> •All X tables •Calculations with four operations •Common factors and multiples and prime numbers •Multiply 4 digit by 2 digit number •Divide 4 digit by 2 digit including remainders as decimals 	Fractions and decimals	<ul style="list-style-type: none"> •Adding and subtracting fractions with different denominators and mixed numbers •Multiply and divide fractions •Calculating with percentages •Rounding •Improper fractions •Problems with fractions, decimals and percentages 	
Measurement	<ul style="list-style-type: none"> •Solving problems involving converting between units of measure •Area and volume and perimeter – formulae •Units of measure up to 3 decimal places •Area of parallelograms and triangles 	Geometry	<ul style="list-style-type: none"> •Circles – radius, diameter and circumference •Building and drawing 2D and 3D shapes and nets •Classifying shapes •Missing angles and lengths •Coordinates – all 4 quadrants •Translation and reflection 	
Statistics	<ul style="list-style-type: none"> •Pie charts and line graphs •The mean average •Mode and median 			
Ratio and	<ul style="list-style-type: none"> •Solving problems involving ratio and 	Algebra	<ul style="list-style-type: none"> •Simple formulae 	



proportion	proportion <ul style="list-style-type: none">•Relative sizes•Missing values•Scale factors		<ul style="list-style-type: none">•Linear number sequences•Express missing numbers algebraically•Equations with 2 unknowns•Brackets (BIDMAS)	
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Our Year 6 mathematicians should be able to

<p>Number and place value</p> <ul style="list-style-type: none"> - Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit - Use negative numbers in context and calculate intervals across zero - Round any whole number to the required degree of accuracy - Solve number and practical problems that involve all other year group number and place value objectives 	<p>Addition & subtraction</p> <ul style="list-style-type: none"> - Perform mental calculations including with mixed operations and large numbers - Use knowledge of the order of operations to carry out calculations involving the four operations - Use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy - Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
<p>Multiplication and Division</p> <ul style="list-style-type: none"> - Identify common factors, common multiples and prime numbers - Perform mental calculations, including with mixed numbers and large numbers - Multiply multi-digit numbers up to 4-digits by a 2-digit whole number using the formal written method for short multiplication - Divide numbers up to 4-digits by a 2-digit whole numbers using the formal written method of short division and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context - Solve multiplication and division multi-step problems in contexts, deciding which operations and methods to use and why 	<p>Fractions and decimals</p> <ul style="list-style-type: none"> - Compare and order fractions including mixed number and improper fractions - Use common factors to simplify fractions, use common multiples to express fractions in the same denomination - Recall and use equivalences between simple fractions, decimals and percentages, including different contexts - Add and subtract fractions with different denominations and mixed numbers, using the concept of equivalent fractions - Multiply simple pairs of proper fractions, writing the answer in the simplest form - Divide proper fractions by whole numbers - Associate a fraction with division to calculate decimal fraction equivalents, for simple fractions
<p>Geometry</p> <ul style="list-style-type: none"> - Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals and regular polygons - Draw 2D shapes given dimensions and angles - Describe positions on the full coordinate grid – all four quadrants - Draw and translate simple shapes on the coordinate grid and reflect them in the axes - Recognise, describe and build simple 3D shapes, including making nets - Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles - Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius 	<p>Statistics</p> <ul style="list-style-type: none"> - Interpret and construct pie charts and line graphs and use them to solve problems - Calculate and interpret the mean, mode and median averages <p>Ratio and Proportion</p> <ul style="list-style-type: none"> - Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts - Solve problems involving the calculation of percentages of whole numbers or measures such as 15% of 360 and the use of percentages for comparison <p>Algebra</p> <ul style="list-style-type: none"> - Express missing number problems algebraically and use simple formulae - Find pairs of numbers that satisfy number sentences with two unknowns - Solve calculations with brackets using (BIDMAS)
<p>Measurement</p> <ul style="list-style-type: none"> - Calculate, estimate and compare volume of cubes and cuboids using standard units, including cm^3 and m^3, and extending to other units such as mm^3 and km^3 - Convert between miles and km - Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from smaller units of measure to a larger unit, and vice versa, using decimal notation to three decimal places - Solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate - Recognise when it is possible to use formulae for area and volume of shapes - Recognise that shapes with the same areas can have different perimeters and vice versa - Calculate the area of parallelograms and triangles 	



Science – Year 6							
Area of science	Key question	Big idea	Key Vocabulary	Enquiry type	Working Scientifically		
Biology	Living things and their habitats	Is bacteria a living thing? In what ways are living things the same and in what ways are they different?	Although some living things do not appear to be active, all will at some stage carry out the life processes of respiration, reproduction, feeding, excretion, growth and developments and will eventually die	micro-organisms crustaceans arthropods mollusc virus bacteria	characteristics vertebrates invertebrates Carl Linnaeus	Finding out using a wide variety of secondary sources Observing over different periods of time Grouping and classifying Comparative and fair tests	<input type="checkbox"/> Decide which type of test they will do based on the type of data collected (continuous or discrete) <input type="checkbox"/> Understand the difference between dependent and independent variables <input type="checkbox"/> Justify why the variable has been isolated in the investigation <input type="checkbox"/> Use all measurements set out in Year 6 mathematics which includes capacity, mass, ratio and proportion <input type="checkbox"/> Choose appropriate scientific instruments for particular investigations e.g. spring scales, lux meter, thermometer <input type="checkbox"/> Take repeated readings where necessary (finding the average) and understand the importance of doing this <input type="checkbox"/> Decide how best to record an present their data based on their investigation and justify their reasons why <input type="checkbox"/> Confidently use data generated to explain the possible reasons for the results <input type="checkbox"/> Make accurate predictions for further tests by referring back to the results from previous investigations <input type="checkbox"/> Create new investigations based on their previous findings rationalising why they think this is the next step Present information using IT such as power-point, animoto and iMovie <input type="checkbox"/> Focus on the planning, doing and evaluating phases when reporting findings <input type="checkbox"/> Use diagrams when necessary <input type="checkbox"/> Confidently present findings orally in front of the class and compare findings with other students <input type="checkbox"/> Explain about what has been found through the investigation and compare this to other enquiries <input type="checkbox"/> Evaluate investigation considering the degree in which results should be trusted e.g. repeated readings <input type="checkbox"/> Explain causal relationships suggesting reasons why based on scientific knowledge. <input type="checkbox"/> Make conclusions based scientific theories and decide whether the results from an investigation support or refute an argument or theory <input type="checkbox"/> Explain reasons why evidence could contradict scientific knowledge
	Animals including humans	Does our heart stop when we sneeze? Can a heart become unhealthy?	The circulatory system takes material needed by cells to all parts of the body and removes waste	biometrics DNA blood vessels nature vs nurture circulatory system pulmonary artery pulmonary vein	platelets plasma haemoglobin	Noticing patterns Observing over different periods of time Comparative and fair tests Finding out using a wide variety of secondary sources	
	Evolution and inheritance	Why do animals often have colours that match their environment?	The different kinds of life, animals, plants and microorganisms, have evolved over millions of generations into different forms in order to survive in the environments in which they live	adaption ancestry evolution extinct natural selection	inheritance species variation naturalist	Noticing patterns Grouping and classifying Using secondary sources of information	
Physics	Light	Why can I hear round corners but not see round corners?	Energy, which cannot be created or destroyed, comes in many different forms and tends to move away from objects that have lots of it.	refraction dispersion filters periscope phenomena	light rays spectrum variables control	Noticing patterns Using secondary sources of information	
	Electricity	Is it possible to change how bright a bulb is or how loud a buzzer is?	Energy, which cannot be created or destroyed, comes in many different forms and tends to move away from objects that have lots of it.	voltage function series circuit circuit diagram symbols	brightness buzzer cell components	Noticing patterns Comparative and fair tests	



Area of science		Year 6 Scientists should be able to
Biology	Living things and their habitats	<ul style="list-style-type: none"> <input type="checkbox"/> Can give examples of animals in the five vertebrate groups and some of the invertebrate groups <input type="checkbox"/> Can give the key characteristics of the five vertebrate groups and some invertebrate groups and create classification keys <input type="checkbox"/> Can compare the characteristics of animals in different groups and give a number of characteristics that explain why an animal belongs to a particular group <input type="checkbox"/> Can give examples of flowering and non-flowering plants <input type="checkbox"/> Chn use given resources and online research to investigate whether bacteria, viruses and fungi are definitely living things. (Whether viruses are alive is open to debate) <input type="checkbox"/> Chn are shown how yeast, sugar and warm water causes a reaction; they then investigate what happens to this reaction when they change particular variables of their choice (sugar/no sugar, water temperature, adding chemicals, etc) <input type="checkbox"/> Chn to use advanced keys to classify a variety of insects. Chn to create their own key to allow others to identify specimens found on the school grounds.
	Animals including humans	<ul style="list-style-type: none"> <input type="checkbox"/> Use diagrams/role play to explain main parts of the circulatory system and their role <input type="checkbox"/> Explain the function of the heart, blood vessels and blood <input type="checkbox"/> Produces a piece of writing that demonstrates the key knowledge e.g. explanation text, job description of the heart <input type="checkbox"/> Can use subject knowledge about the heart whilst writing conclusions for investigations <input type="checkbox"/> Can explain both the positive and negative effects of diet, exercise, drugs and lifestyle on the body <input type="checkbox"/> Present information e.g. in a health leaflet describing impact of drugs and lifestyle on the body <input type="checkbox"/> Know the ways in which nutrients and water are transported in animals including humans <input type="checkbox"/> Chn to investigate the effect of exercise on heart rate and how long it takes for their pulse to return to the resting rate after exercising for a minute <input type="checkbox"/> Over the course of a month, chn investigate whether some volunteers (who do consistent exercise at break time) can lower their resting heart rate.
	Evolution and inheritance	<ul style="list-style-type: none"> <input type="checkbox"/> Know how the Earth has changed over time and how this impacts living things <input type="checkbox"/> Can explain the process of evolution and examples of how an animal or part has evolved over time <input type="checkbox"/> Understand that fossils provide information about things that inhabited the Earth millions of years ago <input type="checkbox"/> Identify characteristics that will make a plant or animal suited or not suited to a particular habitat <input type="checkbox"/> Can explain why the dominant colour of the peppered moth changed over a very short period of time <input type="checkbox"/> Can give examples of fossil evidence that can be used to support the theory of evolution <input type="checkbox"/> Know about reproduction and offspring (recognising that offspring normally vary and are not identical to their parents)
Physics	Light	<ul style="list-style-type: none"> <input type="checkbox"/> Can describe (with diagrams) how light travels in straight lines <input type="checkbox"/> Explain we can see because light either travels from light sources or reflected from other objects into our eyes <input type="checkbox"/> Hypothesise why some people are blind <input type="checkbox"/> Can describe with diagrams, as appropriate, how light travels in straight lines past translucent or opaque objects to form a shadow of the same shape <input type="checkbox"/> Can predict and explain with diagrams or models, as appropriate, how the path of light rays can be directed by reflection to be seen, for example, reflection in car rear view mirrors or in a periscope. <input type="checkbox"/> Explore how simple optical instruments work e.g. periscope, telescope, binoculars, mirror, magnifying glass <input type="checkbox"/> Can predict and explain with diagrams or models, as appropriate, how the shape and size of shadows can be varied
	Electricity	<ul style="list-style-type: none"> <input type="checkbox"/> Compare and give reasons for why components work and do not work in a circuit <input type="checkbox"/> Create circuits to investigate the effect of different voltages on different components <input type="checkbox"/> Change cells and components in a circuit to achieve a specific effect <input type="checkbox"/> Draw circuit diagrams of a range of simple series circuits using recognised symbols <input type="checkbox"/> Predict results and answer questions by drawing on evidence gathered



Art & Design - Year 6								
Generate ideas and make								Key Vocab / Learning Concepts
Draw	Paint	Sculpt / 3D	Print	Collage	Mould	Textiles	Digital (covered in computing)	
Selects appropriate media and techniques to achieve a specific outcome using marks, lines and curves	Investigates symbols, forms, shapes and space	Recreates images in 2D & 3D looking at one area of experience eg recreate a landscape painting, focusing on textures	Experiments with approaches used by other artists Carries out screen printing	Develops experience in embellishing, using more advanced stitching and applique techniques	Uses a malleable material to create an object in the style of a past era	Dye fabrics using tie-dye, batik etc Uses contrasting colours in stitching and weaving	Enhance digital media by editing including sounds, video, animation, still images and installation	negative space Lintel, interior Plaster of Paris, modroc figurine Batik, resist, Brusho, bleed Wedge, kiln score
Knowledge								
Artists: Henri Matisse, Damien Hirst, Tracey Emin, Chris Ofili Designers: Architect: Mayan architecture, Frank Lloyd Wright								
Year 6 Artists and Designers should be able to								
<ul style="list-style-type: none"> ▪ Can explain why they have chosen different tools to create own art ▪ Can explain why they have chosen specific techniques to create own art ▪ Can explain their style of work and how it has been influenced by a famous artist ▪ Knows how to overprint to create different patterns ▪ Knows how to use feedback to make amendments and improvement in their own art ▪ Knows how to use a range of e-resources to create art 								



Computing - Year 6

Area of Computing		Key Understanding and skills	Vocabulary	Implementation	Online Safety
Computer Science/ IT /Digital Literacy	Understanding Technology	<p>To understand how search results are ranked and to be aware that some information may be misleading.</p> <p>To use a range of technology to complete a project and evaluate the results.</p> <p>To explain how computer networks work, beginning to understand how data travels across networks in packets and how these can be broken up and reconstructed.</p> <p>To use search engines to complete research linked to the topic.</p> <p>To evaluate results and information.</p>	<p>Rank</p> <p>Misleading</p> <p>Plagiaries</p> <p>Restrictions</p> <p>Smart Research</p> <p>Checksum</p> <p>TCP/IP</p> <p>Generalisation</p> <p>Packet</p>	<p>Use search engines to complete research linked to the topic. Evaluate results and information.</p> <p>Deepen pupils' understanding of how search engines work.</p> <p>Through a selection of unplugged activities, develop understanding of networks using key vocabulary and terminology.</p>	<p>Core Objectives:</p> <p>To be increasingly aware of the potential dangers in using aspects of ICT and to know when to alert someone if they feel uncomfortable and who to go to in school, at home and in the community(eg reporting to websites, police).</p> <p>Year 6 understanding and skills:</p> <p>I am able to discuss the positive and negative aspects of ICT in my life and that of my family and friends.</p> <p>I understand the need to be a critical analyser of content and that content can be inaccurate.</p> <p>I understand the risks of using the internet (eg scams, phishing).</p> <p>I understand about security settings and how they can protect the user.</p> <p>I understand that I shouldn't put other people's information/ photos etc on the internet without asking them.</p> <p>I understand the use of different domain names (eg .net, .gov etc) and can use these to support validation of information.</p> <p>Key Vocabulary:</p> <p>Critical</p> <p>Validate</p> <p>Security Settings</p> <p>Analyse</p> <p>Scam</p> <p>Phishing</p>
	Digital Literacy	<p>To create a piece of work combining a variety of self-chosen software, considering goal, effect and audience.</p> <p>To present data in different ways considering what makes it easiest for others to interpret and understand.</p>	<p>Formulas</p> <p>Tab</p> <p>Format</p> <p>Edit</p> <p>Interpret</p> <p>Activate</p> <p>Active cell</p> <p>Merged cell</p> <p>Aesthetics</p> <p>Improve</p> <p>Capture</p>	<p>Create a piece of digital content using a variety of chosen software and evaluate choices and effect.</p> <p>Use Excel, photographs, film within a presentation considering interpretation and effect.</p>	
	Programming	<p>To use logical reasoning to detect errors in algorithms.</p> <p>To explain how algorithms work.</p> <p>To solve problems by decomposing and improving.</p> <p>To design, write and evaluate a program combining more than one attribute.</p> <p>To use technology to control an external device/ system.</p> <p>To identify and use repetition, sequence, variables and two way selection in a program.</p> <p>To use various forms of input and output.</p>	<p>Two way selection</p> <p>Abstraction</p> <p>Boolean</p> <p>Condition</p> <p>All other programming vocabulary learnt</p>	<p>Decompose programs to solve problems and improve them. Explain what they found and discuss different solutions. Evaluate each other's work, decomposing, problem solving and finding solutions.</p> <p>Scratch:</p> <p>Work more independently on a Scratch project to develop a program with a given brief linked to topic. It must include a physical system eg use of a Makey Makey board, LED lights and input & output devices, use algorithms with 2 way selection.</p> <p>Explore" What if" type questions by planning and carrying out different outcomes on external devices.</p>	



Our Year 6 computer users should be able to

Programming:

- Design a solution by breaking a problem up
- Recognise that different solutions can exist for the same problem
- Use logical reasoning to detect errors in algorithms
- Use selection in programs
- Work with variables
- Explain how an algorithm works
- Explore 'what if' questions by planning different scenarios for controlled devices

Understanding Technology:

- Use search engines effectively, evaluating results
- Understand that some information can be misleading
- Use a range of technology for a specific project

Digital Literacy:

- Select, use and combine software on a range of digital devices
- Present information in a variety of ways
- Make discerning choices and evaluate results

A safe computer user in Year 6

Knowledge and Understanding:

- Understand the need to be critical evaluators of content
- Understand that some websites and/or pop-ups have commercial interests that may affect the way Information is presented
- Recognise the potential risks of using internet communication tools and understand how to minimise risks
- Understand that some malicious adults may use various techniques to make contact and elicit personal information
- Know that it is unsafe to arrange to meet unknown people on line
- Understand they should not publish other people's pictures or tag them on the internet without permission
- Know that content put online is extremely difficult to remove (digital footprint).

Skills:

- Independently select and use appropriate communication tools to solve problems by collaborating and communicating with others within and beyond school
- Use appropriate strategies for finding, critically evaluation, validating and verifying information eg using different key words, skim reading to check relevance, cross checking,
- Use knowledge of the meaning of different domain names and common website extensions eg .co.uk, .com, .sch, . org etc.



Design & Technology - Year 6

Design, make, evaluate and use technical knowledge

Food	Materials	Textiles	Electrical and Electronics	Construction	Mechanics	Computing	Key Vocab / Learning Concepts
<p>When storing and handling of ingredients use knowledge of micro-organisms</p> <p>Calculate ratios of ingredients to scale up or down from a recipe</p> <p>Create and refine recipes, including ingredients, methods, cooking times and temperature</p>	<p>Use precise scissor cut after roughly cutting out the shape</p> <p>Show an understanding of the qualities of materials to choose appropriate tools to cut and shape such as the nature of fabric may require sharper scissors than would be used to cut paper</p>	<p>Join textiles with a combination of stitching techniques such as back stitch for seams and running stitch to attach decoration</p> <p>Use qualities of materials to create suitable and tactile effects in the decoration of textiles such as soft decoration for comfort on a cushion</p>	<p>Create circuits using electronic kits that employ a number of components such as LEDs, resistors, transistors and chips</p>	<p>Develop a range of practical skills to create products such as cutting, drilling and screwing, nailing, gluing and sanding</p>	<p>Convert rotary motion to linear motion using cams</p> <p>Use innovative combinations of electronics or computing and mechanics in product design</p>	<p>Write code to control and monitor models of products</p>	<p>Seasonal, Health, Nutrition, Balance Environment, Climate, Recipe, Taste, Technique</p> <p>Innovative, functional, appealing</p> <p>Market research</p> <p>Fit for purpose</p> <p>Precision</p> <p>Appropriate tools</p> <p>Nature of fabric, weight, properties</p> <p>Prototypes, testing, revisiting</p> <p>High quality products</p> <p>Micro-organisms</p> <p>Ratios- scale up or down</p> <p>baking and cooking techniques</p>

Year 6 Designers should be able to

- Use market research to inform their plans and ideas
- Follow and refine their plans
- Justify their plans in a convincing way
- Show that they consider culture and society in their plans and designs
- Show that they can test and evaluate their products
- Explain how products should be stored and give their reasons
- Work within a budget
- Evaluate their product against a clear set of criteria



Geography - Year 6

A Year 6 Geographer should be able to

1. Know how to use an atlas by using the Index to find places
2. Know how to use some basic Ordnance Survey map symbols
3. Know how to use Ordnance Survey symbols and six-figure grid references
4. Collect and accurately measure information (e.g. Rainfall, temperature, wind, speed, noise, levels)
5. Know why some places are similar and dissimilar in relation to their human and physical features
6. Know how time zones work and calculate time differences around the world
7. Name the largest deserts in the world and locate desert regions in an atlas
8. Know why industrial areas and ports are important
9. Know the main human and physical differences between developed and third world countries
10. Use Google Earth to locate a country or place of interest and follow the journey of rivers etc.

Topic ➔	Ordnance survey maps	Deserts (and other biomes)	Using technology	Industrial areas	Third world countries vs developed
Skills Covered	2,3	4,5,7	5,10	8	1 6, 9
Activity Ideas/ Context	Plan and take a route using an Ordnance survey map	Compare and contrast features of different biomes	Use Google earth to locate places of interest Comment on places of interest	What are the key features of an industrial area?	Name and locate key third world countries and developed countries Compare and contrast key features
Vocabulary	Ordnance survey map Grid reference (six figure) Symbol	Climate zones Vegetation belts Globalisation Natural resources Minerals Deciduous Savanna Steep Tundra Taiga Montane	Digital computer mapping Location Physical features (of location): mountain, lake, island, valley, river, cliff, forest, beach	Third world Developed (country) Settlement Land use Economic activity (trade links) Distribution of natural resources (food, minerals, water)	Industrial Port Trade links Land use



History - Year 6			
Key Content	Achievements of earliest civilisations: Ancient Egypt	British History: changes in social history linked to Crime & Punishment	Non-European society contrast with UK: early Ancient Mayan civilisation
Topic	Pharaohs	Revolution	Hola Mexico!
Key Vocab	Archaeologist, Afterlife, Curse, Hierarchy Hieroglyphics, Ritual, Sphinx, Tomb Valley of the Kings, Vizier, Pyramid, Giza Rosetta Stone	Empire, Industrial Revolutio, Orphan, Revolutionise Suffragette, Workhouse, Reign, Social Reformer, Slum, Moral	Gods, Civilisation, Glyph, Syllabograms, Logograms Chichen Itza, Tikal, Pre-classic period Ahau or Ahawcenote
Historical skills	Investigating & Interpreting	<ul style="list-style-type: none"> Consider different ways of checking the accuracy of sources, being mindful of fact, fiction and opinion. Show an awareness of the concept of propaganda and how historians must understand the social context of evidence studied. Be aware that slight changes in evidence can lead to different conclusions being made. Suggest things that sources might have missed out, why this might be the case and where missing information can be found. Understand that no single source of evidence gives the full answer to questions about the past. <p>See source work guidelines</p>	
	Chronology	<ul style="list-style-type: none"> Place current study on timeline in relation to other studies; Sequence up to 10 events on a timeline, articulating how some impact others. Find out about beliefs, behaviour and characteristics of people, recognising that not everyone shares the same views and feelings. Investigating how divergence of opinion can affect the events of a period. Know key dates, characters and events of time studied. Identify periods of rapid change and contrast with times of relatively little change. Understand the concepts of continuity and change over time, representing them on a timeline. Explore why periods of turbulence appear in historic periods. Describe main changes in terms of whether they are social, religious, political, technological and cultural 	
	Communicating & Presenting	<ul style="list-style-type: none"> Use the following vocabulary: <ul style="list-style-type: none"> Names of time periods, Primary Source, Secondary Source, archaic, modern causation, pre- and post- continuity, turbulence, legacy, legitimacy Communicate their knowledge through a variety of mediums such as discussion, pictures, drama, model-making, extended writing pieces, whole-class presentations and debates. Write an explanation of a past event in terms of cause and effect using evidence to support and illustrate their explanation. Select and organise information to produce structured work, making appropriate use of dates and terms 	
Significant People/Events	Rosetta Stone, Egyptian gods and goddesses, Tutankhamun, Howard Carter	Emmeline Pankhurst, Sir Robert Peel, Lord John Russell, Isambard Kingdom Brunel, Joseph Lister, Alexander Graham Bell, Thomas Edison, Karl Benz	Palal



Year 6 Historians should

- Research in order to find similarities and differences between two or more periods of history
- Know how to place features of historical events and people from the past societies and periods in a chronological framework
- Know about the main events from a period of history, explaining the order of events and what happened
- Know that many of the early civilizations gave much to the world



Spanish - Year 6					
Listening	Speaking		Reading	Writing	Intercultural understanding
Understand the main points and some of the detail from a short spoken passage eg: • sentences describing what people are wearing • an announcement	Take part in a simple conversation. Express an opinion. Know how to pronounce a range of letter strings. Begin to understand how accents change letter sounds. Can substitute items of vocabulary to vary questions or statements. Pronunciation is becoming more accurate and intonation is being developed.		Begin to read independently. Use a bilingual dictionary to look up new words.	Write a short text on a familiar topic, adapting language already learnt. Spell commonly used words correctly.	Talk about, discuss and present information about a particular country's culture. Begin to understand more complex issues which affect countries in the world today eg poverty, famine religion and war.
Half-Termly Coverage					
Suggested Activities	School life including different subjects, timetables, stationery used, etc.	Celebrations : birthdays, weddings Birth, parties etc	Sports: different names for sports	Healthy Lifestyles	
Key Vocabulary	Me gusta La ciencia La geografia La musica El espanol mi curso favorite es Studio mucho tengo / no tengo necesito Un baton de colle La regla La goma	No me gusta Las matematicas La historia El ingles Cual es tu curso favorito Studio Gracias no entiendo El lapiz El boligrafo Un cahier La calculadora	es fenomenal la Nochebuena La navidad Semana Santa Ano Nuevo Nochevieja Celebrar Decorar Disfrazarse Regalar La costumbre	El futbol El futbol americano El béisbol El baloncesto El voleibol El hockey El tenis El atletismo El ciclismo La gimnasis El rugby descansad distraerse dirmir bien hacer ejercicio fisico mantenerse en forma practicar deporte	me encanta / me chifla detest/odio el agua las patatas los cereals los huevos la carne la leche las manzanas las maranajs las xanahorias el queso estar bien tomar mucho azucar comer demasiado comer ... pporciones de verduras al dia



A Year 6 international speaker can

- hold a simple conversation with at least 4 exchanges
- use their knowledge of grammar to speak correctly
- understand a short story or factual text and note the main points
- use the context to work out unfamiliar words
- write a paragraph of 4-5 sentences
- substitute words and phrases



Music - Year 6				
Featured Composers: Coldplay (present day) & Johann Sebastian Bach (1685-1750)				
	Performing	Improvising and Composing	Listening and reviewing	History of Music
Skills – What?	Confidently sing part songs and canons with control, expression, phrasing and dynamics Sing in harmony confidently and accurately Perform with control, dynamic and awareness of others	Improvise with confidence and an awareness of rhythm, context and purpose. Compose a simple melody showing an understanding of note value and time signature Use a digital composition programme	Identify different ensemble combinations and instruments heard and their role with in the melody .e.g. ostinato, melody Listen to music of differing genres and compare and contrast the different styles	Begin to identify Bach’s style of work Research and talk about the impact different composers have had on people of that time
Inter-related dimensions	<ul style="list-style-type: none"> • Pitch – identify steps, leaps and repeated notes. Identify a major scale pattern and use pitch knowledge to recreate a piece on tuned instruments • Duration – understand 2. 3. 4 metre and how rhythms fit in to a steady beat. Recognise and use a syncopated rhythm. • Dynamics – understand how a wider range of dynamics can be used for expressive effect • Tempo – understand how a wider range of tempi can be used for expletive effect • Timbre – discuss the quality of voice of vocal and instrumental pieces. Identify families of instruments and ensemble combinations e.g. choir, samba • Texture – begin to understand different types of harmonies –simple parts, use of chords • Structure – develop an understanding of conventional musical structure e.g. repeat signs, coda, drone ostinato, theme and variations 			
Possible Coverage	Warms ups. Copy, follow and play rhythms using semi quavers, quavers, crotchets, minims, semibreves including syncopated rhythms Learn and perform ‘Clocks’ and ‘Viva la Vida’ Perform group compositions inspired by Bach On-going singing assemblies Key Stage Performance	Garage band compositions with vocals Learn to play ‘Tocatta and Fugue’ motif using stave notation. Improvise around this. Use as a basis for group composition	Listen to and compare a selection of Coldplay songs. Detailed analysis of ‘Clocks’ Listen to La Cucarcha and El Jarabe Tapatio. Identify Mexican instruments. Extended piece - Listen to and study Bach – ‘Tocatta and Fugue’ (BBC Ten Pieces). Compare with modern version performed by Sky	Identify distinguishing features of Bach’s work. Place different compositions listened to on a timeline
Key Vocabulary	Harmony Repeated motfi Chords	Chords	Tocatta Fugue Band Accelerando/ritardando Mariachi Folk ensemble	Musical periods Baroque Modern



Year 6 Musicians should know how to

- Sing in harmony confidently and accurately
- Perform parts from memory
- Take the lead in a performance
- Use a variety of different musical devices in their composition (including melody, rhythms and chords)
- Evaluate how the venue, occasion and purpose affects the way a piece of music is created
- Analyse features within different pieces of music
- Compare and contrast the impact that different composers from different times have had on people of that time



PSHE - Year 6		
Relationships	Health & Well-Being	Living in the Wider World
<p>What will change as we become more independent? Different relationships, changing and growing, adulthood, independence, moving to secondary school.</p>	<p>How can we keep healthy as we grow? & How do friendships change as we grow? Looking after ourselves; growing up; becoming independent; taking more responsibility.</p>	<p>How can the media influence people? Media literacy and digital resilience; influences and decision-making; online safety.</p>
SMSC (spiritual, moral, social and cultural) development throughout the year		
On- going- Mindfulness / Calming - Reflection time to be included within the weekly timetable of all year groups		
Possible Evidence		
<p>Attraction to others; romantic relationships; civil partnership and marriage. Recognising and managing pressure; consent in different situations. Expressing opinions and respecting other points of view, including discussing topical issues.</p>	<p>What affects mental health and ways to take care of it; managing change, loss and bereavement; managing time online. Human reproduction and birth; increasing independence; managing transition. Keeping personal information safe; regulations and choices; drug use and the law; drug use and the media.</p>	<p>Valuing diversity; challenging discrimination and stereotypes. Evaluating media sources; sharing things online. Influences and attitudes to money; money and financial risks.</p>
Key Vocabulary		
<p>Romantic/Intimate Relationships Attraction Marriage Civil Partnership Forced Marriage Consent</p>	<p>Mental Health/Mental Ill-health Human Rights Affirmation Anxiety Concerns Reproduction Birth Independence Transition Regulations</p>	<p>FGM Personal Network Diversity Social Media Unsafe/Suspicious content Blogs Gambling Assumptions Manipulation Persuasion Vulnerable Extremism</p>



PE - Year 6		
Themes	Skills	Key Vocabulary
Dance		
Mayans and Mexican inspired dance / Why bully me? *	To dance in different styles and create own movements for these To choose own music to accompany a dance To develop and improve based upon feedback To show a journey / story through dance	Composition Improvisation Repetition, Fluency Contrasting
Gymnastics		
Body symmetry*	To incorporate a range of jumps, rolls, balances, shapes and transitions in sequence. To control weight, speed, timings and balance. To smoothly and safely dismount apparatus. To develop a sequence to incorporate both floor and apparatus with clearly identifiable timings	Conditioned Symmetrical Dismount Execution
Games		
Tag Rugby * Hockey * Tennis	To follow and understand rules for a broad range of games To communicate with team mates to create a tactical plan. To take leadership in a game situation To use a range of tactics for attacking and defending To develop accuracy of kicking, shooting and passing when in time pressured game situations	Tag Rugby: Wing, Receive, Try Tennis: Cross court, Down the line, Serve, Volley Hockey: Back line, Dangerous play, Obstruction, Clearing
Athletics		
Decathlon * Personal Challenges – circuits	To use a hammer To develop personal performance To participate in athletics competition To develop a knowledge of preparing for, participating in, and recovering from a training session To create their own interval training session	Decathlon Launch Core strength Stamina
Outdoor and Adventurous Activities		
Archery # Team building	To plan a route and a series of routes for someone else To take account of safety and danger To show leadership when completing a series of problems	Navigate Delegate Collaboration Route
Knowledge and understanding of health, fitness and the body		
To understand why exercise is good for their physical and mental well being To independently prepare their bodies for physical activity To understand how to cool down effectively after To take an independence over their physical activity contribution		Mental wellbeing Emotional wellbeing Physical well being



A Year 6 sports person should be able to

Dance:

- Develop sequences in a specific style
- Choose own music and style

Gymnastics:

- Combine own work with that of others
- Sequence to specific timings

Games:

- Play to agreed rules
- Explain rules to others
- Can umpire
- Make a team and communicate a plan
- Lead others in a game situation

Athletics:

- Demonstrate stamina

Outdoor and Adventurous:

- Plan a route and a series of clues for someone else
- Plan with others, taking account of safety and danger



RE - Year 6				
Big Question	What are the different views on how our world began?	What is like to be a Christian in Vellore?	What does it mean to be a Buddhist?	What can we learn from Jesus?
Key Learning	Creation stories – incorporate Humanist element and compare with other religions	Christians in other parts of the world.	Ourselves, our families and our communities. Can we all be enlightened?	Religious stories and symbols Jesus and his teachings
Key Vocabulary	Agnosticism Atheism Empathy Evidence Evolution Natural selection The Big Bang	Diocese Vellore Missionary Dalits Discrimination David Livingstone Mother Theresa	Enlightenment Nirvana Buddha Siddhartha Gautama Eightfold path	Parables Saints Disciples Parable of the sower Parable of the prodigal son