



Aintree Davenhill Medium Term Planning

Year Group: 5

Term: Spring 1

Maths	Science	English
Number and Place Value (Mental Maths) - Read and write any integer and use decimal notation for tenths, hundredths and thousandths and know what each digit represents - Count forwards and backwards in steps of 0.01, 0.1, 1, 10, 100, 1000 from any positive integer or decimal - Count forwards and backwards in equal steps and describe any patterns in the sequence - Order and compare whole numbers up to 1 000 000, negative numbers and decimals with up to two decimal places - Know by heart facts for all multiplication tables up to 12 x 12 - Complete and interpret information in a variety of sorting diagrams (including those used to sort properties of numbers) - Recall and use addition and subtraction facts for 1 and 10 (with decimal numbers to one decimal place) - Derive and use addition and subtraction facts for 1 (with decimal numbers to two decimal places) - Derive related facts from those already known (e.g. 4 x 0.8 linked to 4 x 8 or 3 + 7 = 10 linked to 0.3 + 0.7 = 1) - Use partitioning to double or halve any number, including decimals to two decimal places - Multiply and divide whole numbers and decimals with up to two decimal places mentally by 10 or 100, and integers by 1000 and use this to convert between units of measurement, e.g. cm to m, g to kg, etc. - Round whole numbers to the nearest 10, 100, 1000 or a number with up to two decimal places to the nearest integer or number of decimal places - Count in fraction steps and convert equivalent fractions (e.g. count in steps of $\frac{1}{12}$ converting to $\frac{1}{12}, \frac{1}{6}, \frac{1}{4}, \frac{1}{3}, \frac{5}{12}, \frac{2}{3}, \dots$) Place Value (Roman Numerals, Counting and Negative Numbers) - Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers through zero - Calculate difference in temperature, including those that involve a positive and negative temperature - Describe and extend number sequences including those with multiplication and division steps and those where the step size is a decimal - Continue to order temperatures including those below 0°C - Read Roman numerals to 1000 (M) and recognise years written in Roman numerals Addition and Subtraction - Add and subtract numbers mentally with increasingly large numbers and decimals to two decimal places - Add and subtract whole numbers with more than 4 digits and decimals with two decimal places, including using formal written methods (columnar addition and subtraction) - Use estimation and inverse to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy - Calculate difference in temperature, including those that involve a positive and negative temperature - Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method) - Select a mental strategy appropriate for the numbers involved in the calculation - Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why - Use all four operations to solve problems involving measure (for example, length, mass, volume, money) using decimal notation Mental and Written Multiplication - Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers - Multiply and divide numbers mentally drawing upon known facts - Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers - Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method) - Select a mental strategy appropriate for the numbers involved in the calculation - Solve problems involving multiplication including using their knowledge of factors and multiples, cubes and squares - Solve problems involving multiplication, including scaling by simple fractions and problems involving simple rates Measurement (Length, Mass and Capacity) - Use, read and write standard units of length and mass to a suitable degree of accuracy - Estimate (and calculate) capacity - Multiply and divide numbers and those involving decimals by 10, 100 and 1000 - Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) Movement of Shape (Reflection and Translation) - Distinguish between regular and irregular polygons based on reasoning about equal sides and angles - Describe positions on the first quadrant of a coordinate grid - Plot specified points and complete shapes - Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed Angles - Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles - Draw given angles, and measure them in degrees (°) - Identify angles at a point and one whole turn (total 360°) - Identify angles at a point on a straight line and a turn (total 180°) - Identify other multiples of 90°	Scientists and Inventors Programme of Study - answer questions about David Attenborough's life and work - research and present facts about living things, including diet and habitat - identify different types of evidence - describe Margaret Hamilton's work on programming the on-board computer for the Apollo 11 spacecraft - list the planets in our solar system - describe Leonardo da Vinci's life and his famous work - order facts about Eva Crane's life and work - group and rank materials based on their hardness and weight Working Scientifically - carry out an inquiry to test the accuracy of Leonardo da Vinci's ideas about proportion - describe the theory that Stonehenge could have been used as an astronomical calendar.	Reading Word Reading - Use knowledge of root words to understand meanings of words - Apply knowledge of prefixes to understand meaning of new words - Use suffixes to understand meanings e.g. -ant, -ance, -ancy, -ent, -ence, -ency, -ible, -able, -ibly, -ably - Read and understand meaning of words on Y5/6 word list – see bottom - Use punctuation to determine intonation and expression when reading aloud to a range of audiences Reading Comprehension Maintain positive attitudes to reading and understanding what they read by: - Listening to and discussing a range of fiction/poetry/non-fiction which they might not choose to read themselves - Regularly listening to whole novels read aloud by the teacher from an increasing range of authors - Exploring themes within and across texts e.g. loss, heroism, friendship - Making comparisons within a text e.g. characters' viewpoints of same events - Analysing the conventions of different types of writing e.g. <i>use of first person in autobiographies and diaries</i> - Recommending books to their peers with reasons for choices - Reading books and texts that are structured in different ways for a range of purposes - Expressing preferences about a wider range of books including modern fiction/traditional stories/myths/legends - Learning a wider range of poems by heart - Preparing poems and playscripts to read aloud and perform, showing understanding through intonation, tone, volume and action so the meaning is clear to an audience Understand what they read by: - Checking that the book makes sense to them and demonstrating understanding e.g. <i>through discussion, use of reading journals</i> - Exploring meaning of words in context - Demonstrating active reading strategies e.g. <i>generating questions to refine thinking, noting thoughts in a reading journal</i> - Inferring characters' feelings, thoughts and motives from their actions and justifying inferences with evidence - Predicting what might happen from information stated and implied - Re-read and reads ahead to locate clues to support understanding - Scanning for key words and text marking to locate key information - Summarising main ideas drawn from more than one paragraph and identifying key details which support this - Identifying how language, structure and presentation contribute to meaning e.g. <i>formal letter, informal diary, persuasive speech</i> Discuss and evaluate how authors use language including figurative language, considering the impact on the reader - Exploring, recognising and using the terms metaphor, simile, imagery - Explaining the effect on the reader of the authors' choice of language - Distinguish between statements of fact or opinion within a text Participate in discussions about books that are read to them and those they can read for themselves, building on their own and others' ideas and challenging views courteously Explain and discuss their understanding of what they have read, including through formal presentations and debates, maintaining a focus on the topic and using notes where necessary by: - Preparing formal presentations individually or in groups - Using notes to support presentation of information - Responding to questions generated by a presentation - Participating in debates on an issue related to reading (fiction or non-fiction) Provide reasoned justifications for their views by: Justifying opinions and elaborating by referring to the text (Point + Evidence + Explanation) Writing Vocabulary, Spelling and Punctuation - Create complex sentences by using relative clauses with pronouns who, which, where, whose, when, that, e.g. Sam, who had remembered his wellies, was first to jump in the river The robberies, which had taken place over the past month, remained unsolved - Create and punctuate complex sentences using ed openers - Create and punctuate complex sentences using ing openers - Create and punctuate complex sentences using simile starters - Demarcate complex sentences using commas and explore ambiguity of meaning - Explore, collect and use modal verbs to indicate degrees of possibility, e.g. might, could, shall, will, must - Use devices to build cohesion within a paragraph, e.g. firstly, then, presently, subsequently - Link ideas across paragraphs using adverbials for time, place and numbers, e.g. later, nearby, secondly - Identify and use brackets and dashes - Use suffixes -ate, -ise, -ify to convert nouns and adjectives into verbs - Investigate verb prefixes e.g. dis-, re-, pre-, mis-, over- Composition - Plan their writing by: - Identifying the audience and purpose - Selecting the appropriate language and structures - Using similar writing models - Noting and developing ideas - Drawing on reading and research - Thinking how authors develop characters and settings (in books, films and performances)

		Draft and write by: - Selecting appropriate grammar and vocabulary - Blending action, dialogue and description within and across paragraphs - Using devices to build cohesion (see VGP column) - Using organisation and presentational devices e.g. headings, subheadings, bullet points, diagrams, text boxes Evaluate and edit by: - Assessing the effectiveness of own and others' writing in relation to audience and purpose - Suggesting changes to grammar, vocabulary and punctuation to enhance effects and clarify meaning - Ensuring consistent and correct use of tense throughout a piece of writing - Ensuring consistent subject and verb agreement - Proofreading for spelling and punctuation errors - Perform own compositions for different audiences: - Using appropriate intonation and volume - Adding movement - Ensuring meaning is clear Spelling - Spell words that they have not yet been taught by using what they have learnt about how spelling works in English - Use further prefixes and suffixes and understand the guidelines for adding them - Spell some words with 'silent' letters, e.g. knight, psalm, solemn - Continue to distinguish between homophones and other words which are often confused - Use knowledge of morphology and etymology in spelling and understand that the spelling of some words needs to be learnt specifically - Use dictionaries to check the spelling and meaning of words - Use the first three or four letters of a word to check spelling, meaning or both of these in a dictionary - Use a thesaurus - Use suffixes -ate, -ise, -ify to convert nouns and adjectives into verbs - Investigate verb prefixes e.g. dis-, re-, pre-, mis-, over- Handwriting - Write fluently - Choose when it is appropriate to print or join writing, e.g. printing for labelling a scientific diagram
History	Geography	Computing
Victorian Innovations and their Impact Chronology Show their chronologically secure knowledge by: - Sequencing events and periods through the use of appropriate terms relating to the passing of time (<i>empire, civilisation, parliament, peasantry</i>) - Identifying where periods studied fit into a chronological framework by noting connections, trends and contrasts over time - In depth study of different periods, using appropriate vocabulary when describing the passing of time and historical concepts (<i>propaganda, bias, primary source, secondary source, reliability</i>) - Know and understand the history of these islands as a coherent, chronological narrative, from the earliest times to the present day Events, People and Changes Show their knowledge and understanding of local, national and international history by: - Gaining historical perspective by placing their growing knowledge into different contexts between cultural, economic, military, political, religious and social history - Establishing a narrative showing connections and trends within and across periods of study Communication - Produce structured work that makes connections, draws contrasts, analyses trends, frames historically valid questions involving thoughtful selection and organisation of relevant historical information using appropriate dates and terms Enquiry, Interpretation and Using Sources - Understand the methods of historical enquiry, how evidence is used to make historical claims, and <i>Begin</i> to discern how and why contrasting arguments and interpretations of the past have been constructed - Use sources as a basis for research from which they will <i>Begin</i> to use information as evidence to test hypotheses <i>Begin</i> to evaluate sources to make historical claims, and discern how and why contrasting arguments and interpretations of the past have been constructed, and establish evidence for particular enquiries - Understand how our knowledge of the past is constructed from a range of different sources and that different versions of past events often exist, giving some reasons for this <i>Begin</i> to recognise why some events, people and changes might be judged as more historically significant than other		Web Designer (CS) (IT/DL) To discuss different types of technology and their benefits/negatives (IT/DL) To name and describe different websites and their purpose (IT/DL) To use a web browser and search engine to find answers to questions (IT) To use editing and formatting to improve the presentation of your work (CS) To name the equipment needed to access the Internet. (CS) To understand what a computer network is. (CS) To understand how browsers work. (CS) To find out the location of a computer using an IP address. (CS) To use the programming/markup language of HTML. (CS) To use and develop your programming skills using HTML. (CS/IT) To media to an HTML website. (IT/DL) To discuss and evaluate the features of a good website. (IT/DL) To understand basic icons used on websites. (CS/IT) To plan and create a basic site map for a website. (IT/DL) To sign in to an online web builder. (DL) To discuss different forms of content and copyright. (DL) To understand how to find copyright-free images. (IT/DL) To add webpages and understand the menu system. (IT) To add images and text to the home page. (IT) To add various forms of content to web pages. (CS/IT) To review and change elements of a webpage to create a better user experience. (CS/IT) To evaluate your webpage. (IT) To review the previous vocabulary
D.T	Art	Music
Mechanical systems – Making a slingshot car Produce a suitable plan for each page of their book. Produce the structure of the book. Assemble the components necessary for all their structures/mechanisms. Hide the mechanical elements with more layers using spacers where needed. Use a range of mechanisms and structures to illustrate their story and make it interactive for the users. Use appropriate materials and captions to illustrate the story.		South and West Africa To sing a traditional African song unaccompanied To sing a traditional African song unaccompanied To hold the tune of my part within a group performance To sing unaccompanied To use expression within own singing Playing 'Shosholoza' To use tuned percussion to play a chord progression To play a major chord on tuned percussion To play a two-chord progression To play the progression with accuracy The 'Shosholoza' show To use vocals or tuned percussion to perform a piece of music as an ensemble To maintain and play a part accurately To stay in time with the other performers To offer suggestions for improvement

		Drumming Away to Africa To play call and response rhythms using percussion instruments To listen to the pulse and play own instrument in time To join back in if place lost To count the rests (silences) accurately Eight Beat Breaks To create an eight beat break to play within a performance To create a break that fills eight counts To play own break accurately To play own break in the correct place and in time
		Spanish Listening - Follow a short familiar text listening and reading at the same time - Listen attentively and understand more complex phrases and sentences; join in to show understanding - Listen for gist - Understand longer and more complex phrases / sentences - Pick out main details from a story, poem, song, conversation or passage Speaking - Speak with increasing fluency - Prepare and practise a simple conversation using familiar vocabulary and structures in new contexts - Prepare a short presentation on a familiar topic - Understand and express simple opinions - Initiate and sustain conversations and tell stories - Speak in sentences using familiar vocabulary, phrases and basic language structures - Perform to an audience speaking clearly and audibly with accurate pronunciation and intonation - Speak with increasing spontaneity - Use repair strategies to keep a conversation going Reading - Read carefully and show understanding of words, phrases and simple writing - Re-read frequently a variety of short texts - Read and understand the main points and some detail from a short written passage - Identify different text types and read short, authentic texts for enjoyment or information - Match sound to sentences and paragraphs - Broaden vocabulary - Develop strategies for understanding new words in familiar material including using a dictionary - Apply phonic knowledge of the foreign language in order to decode text Writing - Write phrases from memory and adapt these to make new sentences - Express ideas clearly - to write words, short phrases and short sentences, using a reference - Be able to write at varying length, for different purposes and audiences - Write sentences on a range of topics using a model - Write in sentences using familiar vocabulary, phrases and basic language structures with increasing accuracy Grammar - Nouns - Gender - Singular and plural forms - Definite and indefinite article - Develop an awareness of sound spelling link to be able to write with increasing accuracy - Recognise different word classes e.g. nouns, verbs, adjectives - Recognise and use high frequency verbs - Question words - Develop an awareness of the place of the adjective in the sentence - Develop an awareness of adjectival agreements - Simple adverbs of time (time phrases including o'clock) - Develop an awareness of word order - Apply knowledge of language rules and conventions when building short sentences - Personal pronouns I, you, he, she, it, we, they - Develop an awareness of verb patterns - Conjugate regular high frequency verbs - Conjugate some basic high frequency irregular v
P.E	P.S.H.E	R.E
Netball To choose the appropriate pass for different scenarios To find space to receive in a game. To use different dodging techniques to outwit a defender and get free. To practice and perform pivoting and quick turns. To get into closer shooting positions To react and move quickly in isolation and in games. Gymnastics 1 The key steps to perform a roundoff. To create and perform a partner sequence using symmetry. To create and perform a partner sequence using asymmetry. To perform a counter-balance with a partner. To perform smooth transitions between counterbalances using different levels.	Living in the Wider World - To understand what charity is and explain why people donate to charity - To fundraise money for a charity - To understand deductions that are taken from payslips - To explain what budgeting is and why it is important - To explain what migration is - To explain why people need to migrate - To explain how to keep safe online	U2.5 Is it better to express your beliefs in arts and architecture or in charity and generosity? (Part 1) This investigation enables pupils to learn in depth from two different religions about why their holy buildings and works of art matter to them as expressions of devotion to God and worship, and about how they practice generosity and charity. Muslim and Christian examples are sometimes criticised by nonreligious people: this critique is examined too. Pupils will gain a rich knowledge of some examples of religious architecture and of examples of religious charities. Of course, the rather polarising title can receive the response ‘both matter’, as the final lesson will show, but the controversy is good for the pupils’ learning. This unit builds a strong sequential mode of learning on top of earlier work on ‘holy buildings’ Pupils will: - Respond with ideas of their own to the title question (B2). - Find out about religious teachings, charities and ways of expressing generosity (C3).

To evaluate each other's work and suggest improvements.

- Describe and make connections between examples of religious creativity (buildings and art) (A1).
- Show understanding of the value of sacred buildings and art (B3).
- Suggest reasons why some believers see generosity and charity as more important than buildings and art (B2).
- Apply ideas about values and from scriptures to the title question (C2).
- Outline how and why some Humanists – and people within religions - criticise spending on religious buildings or art (A3).
- Examine the title question from different perspectives, including their own (C1).