



Aintree Davenhill Medium Term Planning

Year Group: 5

Term: Summer 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, and 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. 4×0.8 linked to 4×8 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 $\frac{1}{12}, \frac{1}{6}, \frac{1}{4}, \frac{1}{3}, \frac{5}{12}, \frac{1}{2}, \dots$) Place Value - Identify, represent and estimate numbers using the number line - Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit - Identify the value of each digit to three decimal places - Read, write, order and compare numbers with up to three decimal places - Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 - Count forwards and backwards in decimal steps - Describe and extend number sequences including those with multiplication and division steps and those where the step size is a decimal - Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 - Round decimals with two decimal places to the nearest whole number and to one decimal place - Solve number problems and practical problems that involve all of the above - Find 0.01, 0.1, 1, 10, 100, 1000 and other powers of 10 more or less than a given number than a given number Fractions - Recognise mixed numbers and improper fractions and convert from one form to another - Compare and order fractions whose denominators are all multiples of the same number (including on a number line) - Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths - Add and subtract fractions with the same denominator and denominators that are multiples of the same number (using diagrams) - Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams Measurement (Time) - Continue to read, write and convert time between analogue and digital 12 and 24-hour clocks - Complete, read and interpret information in tables, including timetables - Solve problems involving converting between units of time Data Handling (Measurement) - Understand and use approximate equivalences between metric and common imperial units such as pints - Solve comparison, sum and difference problems using information presented in all types of graph including a line graph - Distinguish between regular and irregular polygons based on reasoning about equal sides and angles - Use the properties of rectangles to deduce related facts and missing lengths and angles - Identify 3-D shapes, including cubes and other cuboids, from 2-D representations - Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes - 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 - 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) - Add and subtract numbers mentally with increasingly large numbers and decimals to two decimal places - 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 - Use estimation and inverse to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy - Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why - Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context - Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 - Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) - 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 and division, including scaling by simple fractions and problems involving simple rates	Living things and their habitats Programme of Study - Study the life cycle of various mammals - Study the life cycle of amphibians - Study the life cycle of insects - Study the life cycle of birds - Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird - Describe the life process of reproduction in some plants and animals Working Scientifically - Observe and compare the life cycles of plants and animals in their local environment with other plants and animals around the world (in the rainforest, in the oceans and in desert areas) - Ask pertinent questions - Suggest reasons for similarities & differences - Observe changes in an animal over a period of time (tadpoles) - Comparing how different animals reproduce and grow	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
	Brazil Locational Knowledge • Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America • Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night) Place Knowledge • A region of the United Kingdom • A region within South America Human and Physical Geography • Describe and understand key aspects of: - physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains - human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water Mapping • Use a wide range of maps, atlases, globes and digital maps to locate countries and features studied • Relate different maps to each other and to aerial photos • Begin to understand the differences between maps e.g. Google maps vs. Google Earth, and OS maps • Choose the most appropriate map/globe for a specific purpose • Follow routes on maps describing what can be seen (River Amazon) • Interpret and use thematic maps • Understand that purpose, scale, symbols and style are related • Recognise different map projections • Identify, describe and interpret relief features on OS maps • Use latitude/longitude in a globe or atlas • Create sketch maps using symbols and a key • Use a wider range of OS symbols including 1:50K symbols • Know that different scale OS maps use some different symbols • Use models and maps to discuss land shape i.e. contours and slopes • Use the scale bar on maps • Read and compare map scales • Draw measured plans Enquiry and Investigation • Ask and answer questions that are more causal e.g. Why is that happening in that place? Could it happen here? What happened in the past to cause that? How is it likely change in the future? Make predictions and test simple hypotheses about people and places	Binary Messages (IT) (CS) To understand what binary is and how computers use it (CS) To convert binary into decimal. (IT) To independently add various forms of digital media to a document. (CS) To understand how information (data) can be sent as binary numbers. (CS) To convert a binary message into text. (CS) To convert a text message into binary code. (IT/CS) To create a script that explains binary and acts as a tutorial for others. (IT) To create a screen recording guide using Seesaw or an alternative application. (IT) To generate a QR code that links to a digital piece of work. (IT) To plan and layout a poster, including text, images and a QR code. (IT/DL) To source copyright-free images to use in a digital document. (IT) To create and save a QR code that links to a digital video. (IT) To create rows and columns in a spreadsheet with title text (IT) To enter data into a spreadsheet (IT) To explain how a spreadsheet can help organise and analyse data (IT) To enter data into a spreadsheet. (IT) To perform basic calculations using formulas. (IT) To create and interpret graphs based on data.
D.T	Art	Music

Cooking and nutrition Describe the process of beef production. To understand how ingredients are reared and processed. Research a traditional recipe and make changes to it. To make adaptations to design a recipe. Add nutritional value to a recipe by selecting ingredients. To evaluate nutritional content. To practise food preparation skills To design a food label Prepare and cook a version of bolognese sauce. To follow an adapted recipe		Looping and Remixing Body percussions loops To be able to play a simple looped rhythm from notation To hold own part To play accurately and in time To help to layer a looped rhythm Mixing loops To explore how sound can be layered using loops To create loops of music To build layers of sound that work well together Learning the original To be able to play a melody line accurately and fluently To describe the similarities and differences between an original song and its remix To accurately play the melody line of a piece of music To play a melody confidently and fluently Looping fragments To select a section of a tune and perform it as a loop To choose a fragment of the tune to turn into a loop To accurately play a section of the tune as a loop To play in time to the backbeat Remix To combine loops to create a remix To create a suitable structure for my piece of music To perform own piece accurately To play own piece in time
		Spanish
P.E	P.S.H.E	R.E
Cricket To work with a partner to score runs. To throw accurately over short distances to get batters out. To follow the path of the ball to catch as a wicketkeeper. To overarm bowl with accuracy whilst using a run-up. To play a forward defensive shot. To set a field in a game to limit the runs scored by a batter. Gymnastics 2 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. To evaluate each other's work and suggest improvements.	Relationships • To identify the qualities of a good friend • To understand online pressure • To explain how to use games and apps safely • To understand peer pressure and saying no online • To understand healthy friendships • To understand how to identify good friendships	U2.4 If God is everywhere, why go to a place of worship? This investigation enables pupils to learn in depth from Christianity, considering in a detailed way some teachings of Jesus and the ways they are applied today. Pupils will consider examples of what Jesus said, and how Christians today respond to the challenges of his teachings. It enables a clear sequence of learning and the development of a rich knowledge of Christian worldviews. Pupils use some if the main disciplines with which religion and worldviews are studied: they think about making sense of texts and about questions of meaning, values and truth. Pupils will: • Make connections between some of Jesus' teachings and the way Christians live today (A1). • Discuss their own ideas about the importance of values to live by, comparing them to Christian ideas (C3). • Outline three or more examples of Jesus' teaching on how his followers should live (A2). • Offer interpretations of two of Jesus' parables and say what they might teach Christians about how to live (B3). • Explain the impact Jesus' example and teachings might have on Christians today (B1). • Express their own understanding of what Jesus would do in relation to a moral dilemma from the world today (C3). • Explain the links between Jesus' death on the cross and Christian belief in love and forgiveness, giving reasons why Christians want to follow Jesus (A2). • Investigate and explain the challenges of following Jesus' teaching about love, forgiveness justice and / or generosity, expressing their own ideas (C3).