Aintree Davenhill Medium Term Planning

Year Group: 5 Term: Summer 2

Maths

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 or3 + 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$\frac{1}{12}, \frac{1}{6}, \frac{1}{4}, \frac{1}{3}, \frac{5}{12}, \frac{1}{2}, \ldots$)

Place Value

- Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit
- Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000
- Describe and extend number sequences including those with multiplication and division steps and those where the step size is a decimal
- Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero
- Continue to order temperatures including those below 0°c
- Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000
- Solve number problems and practical problems that involve all of the above

Written Calculations

- 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)
- 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
- 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
- Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method)
- Use estimation and inverse to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy
- Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign

Fractions

- Round decimals with two decimal places to the nearest whole number and to one decimal place
- Solve problems involving number up to three decimal places
- Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal
- Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}, \frac{1}{4}, \frac{1}{5}, \frac{2}{5}, \frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25

Measurement (Mass, Volume, Capacity and Time)

- Solve problems involving converting between units of time
- Use all four operations to solve problems involving measure (for example, mass, capacity and volume) using decimal notation, including scaling
- Understand the difference between liquid volume, including capacity and solid volume
- Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints

Measurement (Area and Volume)

- Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes
- Understand the difference between liquid volume, including capacity and solid volume
- Estimate volume (for example, using 1 cm^3 blocks to build cuboids (including cubes)) and capacity (for example, using water)

Science

Animals, including humans

Programme of Study

- Describe the changes as humans develop to old age
- Compare and present data using bar and line graphs.
- Report findings in oral form.
- Order the stages of human development.
- Demonstrate understanding of how babies grow in height.
- Describe the main changes that occur during puberty.
- Explain the main changes that take place in old age.
- Animals are alive; they move, feed, grow, use their senses, reproduce, breathe/respire and excrete

Working Scientifically

- Research the gestation periods other animals and comparing them with humans

English

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. *use of first person in autobiographies and diaries*
- 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. *through discussion, use of reading journals*
- Exploring meaning of words in context
- Demonstrating active reading strategies e.g. *generating questions to refine thinking, noting thoughts in a reading journal*
- 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. *formal letter, informal diary, persuasive speech*

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**
Ancient Egypt Chronology Show their chronologically secure knowledge by: • Sequencing events and periods through the use of appropriate terms relating to the passing of time *(empire, civilisation, parliament, peasantry)* • 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 (*propaganda, bias, primary source, secondary source, reliability)* Events, People and Changes Show their knowledge and understanding of local, national and international history by: • Understanding significant aspects of history – nature of ancient civilisations; expansion and dissolution of empires; characteristic features of non-European societies; achievements and follies of mankind 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 *Begin to* discern how and why contrasting arguments and interpretations of the past have been constructed • Begin 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		You Tuber (DL) (DL) To explain what YouTube is. (DL) To explain what vlogging is. (DL) To understand the Online Safety Settings for Children Using YouTube. (DL) To discuss the mechanics of YouTube. (DL) To understand the term influencer. (DL) To understand online advertising. (DL) To discuss online bullying and its various forms. (DL) To identify how to report online bullying. (IT) To create a still or animated digital logo. (DL) To understand the term 'fake news' and 'misinformation.' (DL) To understand the importance of fact-checking. (DL) To understand methods of analysing AI images. (IT) To create a script for a YouTube-style video. (DL) To explain short-form video. (DL) To explain social media and age requirements. (DL) To explain what to do if they encounter inappropriate content online. (IT) To create a storyboard. (DL/IT) To create a YouTube-style video based on a script and storyboard. (IT) To add audio/music to a video clip. (IT) To share the digital video with another application.
D.T	**Art**	**Music**
	Painting and mixed media Outline a portrait drawing with words, varying the size, shape and placement of words to create interest. Try a variety of materials and compositions for the backgrounds of their drawings. Communicate to their partner what kind of photo portrait they want. Show that they are making decisions about the position of a drawing on their background, trying multiple ideas. Create a successful print. Use some Art vocabulary to talk about and compare portraits. Identify key facts using a website as a reference. Explain their opinion of an artwork. Experiment with materials and techniques when adapting their photo portraits. Create a self-portrait that aims to represent something about them. Show they have considered the effect created by their choice of materials and composition in their final piece.	Musical Theatre What is musical theatre? To understand the history of musical theatre To identify at least three features of musical theatre To describe some of the roles involved in making musical theatre To place types of musicals accurately on a timeline Character or action song To identify character songs and action songs To identify a character song To identify an action song To justify own opinions by giving examples Create your own musical To create a musical theatre scene To work as part of a group To plan a musical scene to tell the story of a journey To think of or write a song that tells the story Rehearsing my musical To rehearse a musical theatre scene To work as part of a group To perform in time with own group To ensure that there are smooth transitions between spoken dialogue, singing and dancing

		Performing my musical To perform a musical theatre scene To perform in time with others in own group To sing in tune and make sure own voice is loud and clear To perform with expression to help convey emotion To work as part of a group to make own scene a success To ensure that there are smooth transitions between each element (speech, dance, song)
		Spanish
P.E	**P.S.H.E**	**R.E**
Athletics To run for speed & distance on our own and as part of a team. Pacing our run over longer distances. Different jumping styles and exploring which ones we can jump further with. To use the push-throw technique. To exchange a baton within a restricted area. To design a running, jumping or throwing activity for others using the STEP principle. Handball The jump shot. To goal keep by closing the angles attackers can shoot from. The double fault rule and how it applies to dribbling. To perform a pivot to create space to pass or shoot. The role of set plays to create opportunities to score. To select and apply new skills in a competition situation.	Relationships ● To understand benefits of a growth mind-set and explain how to develop a growth mind-set ● To explain who is in their family, while recognising families are different ● To understand the physical and emotional changes that happened during puberty If covering FGM lessons: ● To understand the difference between culture and religion ● To know I have the right to say no If you NOT covering FGM lessons: ● To know the types of difficulties people with dementia may experience	U2.10 Green Religion. How and why should religious communities do more to care for the earth? This investigation enables pupils to learn in depth about the challenges of climate justice issues and about how different religious and spiritual ways of life can contribute to the urgent human need to stop spoiling the environment and the Earth. Pupils will develop a rich knowledge of examples, concepts, sources of wisdom and authority and practice in different religions and worldviews with regard to climate change, environmental care and building a sustainable future. This is a special and original unit of RE and can be used for all pupils at any appropriate point in the age range 9-11. It fits well at the end of Year 5 or Year 6, for example. The unit intends to provide excellent experiences that encourage pupils to learn about religion and beliefs, environment, climate and justice issues, in challenging ways that promote the wellbeing of 'people and planet'. RE can make a contribution to enabling learners to think through issues about environment, drawing on rich traditions in religions and worldviews about the natural world and human responsibility. Pupils will: • Describe some key environmental problems and some key religious teachings about the Earth (A1). • Respond sensitively to examples of green religious practice with ideas of their own (B2). • Find out about two examples of religious projects seeking to have an environmental impact (C3). • Make connections between beliefs about the earth and activist behaviour in different religions (A1). • Understand the challenges facing the planet and responses from different religions (B2). • Discuss and describe their own and others' ideas about the kinds of collaboration, activism and commitment needed to 'save the Earth' (C3). • Explain similarities and differences between religious beliefs about the Earth (A1). • Consider and evaluate the contributions religions can make to environmental protection (B3). • Express varied ideas about key questions to do with the need for 'greener religions' (C3).