Aintree Davenhill Medium Term Planning

Year Group: 4 Term: Summer 2

Maths

Number and Place Value (Mental Maths)

- Read and write numbers with one decimal place
- Count on and back in 0.1s, 1s, 10s or 100s from any number up to 10,000
- Count forwards and backwards in equal steps and describe any patterns in the sequence
- Order a set of random numbers to at least 10,000 including amounts of money and measures involving decimals
- Recall addition and subtraction facts for 100
- Recall and use addition and subtraction facts for multiples of 100 totalling 1000
- Derive and use addition and subtraction facts for 1 and 10 (with decimal numbers to one decimal place)
- Use partitioning to double or halve any number, including decimals to one decimal place
- Recall multiplication facts for all times up to 12 x 12 and derive associated division facts
- Identify patterns of similar calculations, e.g. if I know 7 x 8, I also know 0.7 x 0.8, 70 x 8, 70 x 80 etc.
- Multiply and divide numbers by 10, including those which have answers to one decimal place
- Count in fraction steps, e.g. $^{1}/_{5}$, $^{2}/_{5}$, $^{3}/_{5}$

Fractions

- Read and write numbers with one decimal place
- Use pictorial representations such as fraction walls to recognise where more than two fractions are equivalent e.g ¾, 6/9, 9/12
- Recognise and show, using diagrams, families of common equivalent fractions
- Recognise and show, using diagrams, families of common equivalent fractions
- Recognise and write decimal equivalents of any number of tenths or hundredths
- Recognise and write decimal equivalents to ¼, ½, ¾
- Add and subtract fractions with the same denominator (using diagrams)
- Where a fraction of an amount cannot be found by using known division facts, use pictorial representations, e.g. bar model, to find non-unit fractions of a set of objects
- Find non-unit fractions of an amount by using division to find the unit fraction then multiplying to scale up by the numerator 4/7 of 315 by calculating 315 ÷ 7 to find 1/7 which is 45 then 45 × 4 to find 4/7 of 315 which is 180
- Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number
- Solve simple measure problems involving fractions and decimals to two decimal places
- Solve simple money problems involving fractions and decimals to two decimal places

2D and 3D Shape

- Complete a simple symmetric figure where the line of symmetry is not vertical or horizontal
- Compare and name any two angles less than two right angles in any orientation, identifying which is greater and less
- Order more than two angles less than two right angles in any orientation
- Compare and name any two angles less than two right angles in any orientation, identifying which is greater and less
- Order more than two angles less than two right angles in any orientation
- Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes (2-D shapes)
- Compare and classify geometric shapes based on their properties and sizes (3-D shapes)

Statistics

- Understand that discrete data that can only take specific, separate values and the data sets are not related to each other Interpret and present discrete data using appropriate graphical methods, including bar charts
- Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs
- Understand that continuous data is data that can take on any value along a continuum
- Interpret and present continuous data using appropriate graphical methods, including time graphs
- Solve comparison, sum and difference problems using information presented in time graphs
- Use a variety of sorting diagrams to compare and classify numbers

Place Value

- Count backwards through zero to include negative numbers
- Know that L represents 50 and C represents 100
- Represent numbers with only additive properties up to 100 i.e. not ending in 4 or 9
- Know that I can only be used before V and X to represent 1 less than 5 (4) and 1 less than 10 (9)
- Know that X can only be used before L and C to represent 10 less than 50 (40) and 10 less than 100 (90)

Science

Animals, including humans (Teeth, Eating and Digestion)

Programme of Study

- Describe the simple functions of the basic parts of the digestive system in humans
- Identify the different types of teeth in humans and their simple functions
- Construct and interpret a variety of food chains, identifying producers, predators and prey
- Describe how teeth and gums have to be cared for in order to keep them healthy

Working Scientifically

- Compare the teeth of carnivores and herbivores
- Suggest reasons for differences
- Finding out what damages teeth and how to look after them
- Draw and discuss their ideas about the digestive system and compare them with models or images

English

Reading

Word Reading

- Use knowledge of root words to understand meanings of words
- Use prefixes to understand meanings, e.g. sub-,inter-, anti-,-auto-
- Use suffixes to understand meanings, e.g. -ation, -ous, -tion, -sion, -ssion, -cian
- Read and understand meaning of words on Y3/4 word list – see bottom
- Use punctuation to determine intonation and expression when reading aloud to a range of audiences

Reading Comprehension

Develop pleasure in reading, motivation to read, vocabulary and understanding by:

- Listening to, reading and discussing a range of fiction, poetry, plays and non-fiction in different forms e.g. *advertisements, formal speeches, leaflets, magazines, electronic texts*
- Regularly listening to whole novels read aloud by the teacher
- Analysing and evaluate texts looking at language, structure and presentation
- Analysing different forms of poetry e.g. *haiku, limericks, kennings*
- Reading books and texts for a range of purposes and responding in a variety of ways
- Analysing and comparing a range of plot structures
- Retelling a range of stories, including less familiar fairy stories, myths and legends
- Identifying, analysing and discussing themes e.g. *safe and dangerous, just and unjust, origins of the earth, its people and animals*
- Identifying, discussing and collecting effective words and phrases which capture the reader's interest and imagination e.g. *metaphors, similes*
- Learning a range of poems by heart and rehearsing for performance
- Preparing poems and playscripts to read aloud, showing understanding through intonation, tone, volume and action

Discussing their understanding of the text

- Explaining the meaning of key vocabulary within the context of the text
- Making predictions based on information stated and implied
- Demonstrating active reading strategies e.g. generating questions, finding answers, refining thinking, modifying questions, constructing images
- Drawing inferences around characters' thoughts, feelings, actions and motives, and justify with evidence from the text using point and evidence
- Identifying main ideas drawn from more than one paragraph and summarising these e.g. character is evil because…1/2/3 reasons, Clitheroe Castle is a worthwhile place to visit because 1/2/3 reasons across a text

Retrieve and record information from non-fiction

- Analysing and evaluating how specific information is organised within a non-fiction text e.g. *text boxes, sub-headings, contents, bullet points, glossary, diagrams*
- Scanning for dates, numbers and names
- Explaining how paragraphs are used to order or build up ideas, and how they are linked
- Navigating texts to locate and retrieve information in print and on screen

Participate in discussion about what is read to them and books they have read independently, taking turns and listening to what others say

- Develop, agree on and evaluate rules for effective discussion

Making and responding to contributions in a variety of group situations e.g. *whole class, independent reading groups, book circles*

Writing

Composition

Plan their writing by:

- Reading and analysing narrative, non-fiction and poetry in order to plan and write their own
- Identifying and discussing the purpose, audience, language and structures of narrative, non-fiction and poetry for writing
- Discussing and recording ideas for planning e.g. story mountain, story map, text map, non-fiction bridge, story board, boxing-up text types to create a plan

Draft and write by:

- Developing settings and characterisation using vocabulary to create emphasis, humour, atmosphere, suspense
- Planning and writing an opening paragraph which combines the introduction of a setting and character/s
- Organising paragraphs in narrative and non-fiction
- Linking ideas within paragraphs e.g. fronted adverbials for when and where
- Generating and select from vocabulary banks e.g. powerful adverbs, adverbial phrases, technical language, persuasive phrases, alliteration appropriate to text type

Evaluate and edit by:

- Proofreading to check for errors in spelling, grammar and punctuation in own and others' writing
- Discussing and proposing changes with partners and in small groups
- Improving writing in light of evaluation
- Perform own compositions for different audiences

Use appropriate intonation, tone and volume to present their writing to a range of audiences

Spelling

- Use further prefixes and suffixes and understand how to add them
- Spell further homophones
- Spell words that are often misspelt
- Use the first three letters of a word to check its spelling in a dictionary
- Write from memory simple sentences, dictated by the teacher, that include words and punctuation taught so far

- Represent any number up to 100

- Learn to spell new words correctly and have plenty of practice in spelling them
- Understand how to place the apostrophe in words with irregular plurals (e.g. children's)
- Spell words as accurately as possible using their phonic knowledge and other knowledge of spelling, such as morphology and etymology

Handwriting
- Write with consistency in size and proportion of letters, e.g. by ensuring that the downstrokes of letters are parallel and equidistant; that lines of writing are spaced sufficiently so that the ascenders and descenders of letters do not touch

History

Geography

The U.K's Coastline
Locational Knowledge
- Name and locate counties and cities of the United Kingdom

Place Knowledge
- A region of the United Kingdom

Human and Physical Geography
- Describe and understand key aspects of:
- physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle
- 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 wider range of maps (including digital), atlases and globes to locate countries and features studied
- Use maps and diagrams from a range of publications e.g. holiday brochures, leaflets, town plans
- Use maps at more than one scale
- Recognise that larger scale maps cover less area
- Make and use simple route maps
- Recognise patterns on maps and begin to explain what they show
- Use the index and contents page of atlases
- Label maps with titles to show their purpose
- Recognise that contours show height and slope
- Use 4 figure coordinates to locate features on maps
- Create maps of small areas with features in the correct place
- Use plan views
- Recognise some standard OS symbols
- Link features on maps to photos and aerial views

- Fieldwork
- Use the eight points of a compass
- Observe, measure and record the human and physical features in the local area using a range of methods including sketch maps, cameras and other digital devices
- Make links between features observed in the environment to those on maps and aerial photos

Enquiry and Investigation
- Ask more searching questions including, 'how?' and, 'why? as well as, 'where?' and 'what?' when investigating places and processes
- Make comparisons with their own lives and their own situation
- Show increasing empathy and describe similarities as well as differences

Computing

4.6 Games Designer

The children will learn all about the career of a Games Designer. They will play games, write reviews and then design and prototype their own game. Finally they will pitch their game idea to the class.

(MS) I can label the different types of input connections on devices.
(MS) I can explain common file types.
(CS) I can design an algorithm to simulate a real-life situation.
(CS) I can solve an open-ended problem by breaking it up into smaller parts.
(CS) I can design and write a program for a given purpose including specific programming features.
(CS) I can test existing programs to see how they could be improved.
(IT) I can improve the quality and presentation of my work using editing and formatting techniques.
(IT) I can create with technology. E.g. Video, animation, 3D.
(DL) I can collaborate online to create digital content. (DL) I understand the impact technology can have on my health, well being and lifestyle. (Health well being).

D.T

- Kapow – Torches

Key knowledge

- Designing a torch, giving consideration to the target audience and creating both design and success criteria focusing on features of individual design ideas.
- Making a torch with a working electrical circuit and switch.
- Using appropriate equipment to cut and attach materials.
- Assembling a torch according to the design and success criteria.
- Evaluating electrical products.

Testing and evaluating the success of a final product.

Key skills

- To understand that electrical conductors are materials which electricity can pass through.
- To understand that electrical insulators are materials which electricity cannot pass through.
- To know that a battery contains stored electricity that can be used to power products.
- To know that an electrical circuit must be complete for electricity to flow.

To know that a switch can be used to complete and break an electrical circuit.

Art

Music

Adapting and transposing motifs (Theme: Romans)
Here Come the Romans
To sing in tune and in time
To sing in time with other people and a backing track
To follow or remember the lyrics
To follow the tune

Musical Motifs
To understand what a musical motif is
To explain what a motif is
To hear and recognise a motif in a piece of music
To play a motif on a tuned instrument

Motifs and Mosaics
To compose and notate a motif
To compose a motif
To use graphic notation to record a motif
To recognise standard rhythmic notation

Motif Development
To develop and transpose a musical motif
To transpose (change the key of) own motif
To use sharp and flat notes to transpose own motif
To adapt own motif (by changing notes, the rhythm or reversing the order)

Combine and Perform
To combine and perform different versions of a musical motif
To combine different versions of a musical motif
To perform own part in a group performance
To play from musical notation

Spanish

Listening
- Listen attentively and understand instructions
- Recognise and respond to sound patterns and words
- Listen and respond to simple rhymes, stories and songs
- Listen attentively and show understanding by joining in and responding
- Listen for specific words and phrases
- Listen for sounds rhyme and rhythm
- Follow a short familiar text listening and reading at the same time

Speaking
- Speak with increasing confidence
- Perform simple communicative tasks using single words, phrases and short sentences
- Make links between some phonemes, rhymes and spellings, and read aloud familiar words
- Recognise questions and negatives and politeness conventions
- Ask and answer questions on several topics
- Imitate pronunciation and intonation so that others can understand
- Memorise language and present ideas and information e.g. a short presentation about self / role play

Reading
- Respond to written language from a range of sources
- Appreciate stories, songs and poems in the language
- Recognise some familiar words in written form
- Read and understand a range of familiar written phrases
- Follow a short familiar text listening and reading at the same time
- Make links between some phonemes, rhymes and spellings
- Apply phonic knowledge of the foreign language in order to decode text
- Read some familiar words and phrases aloud and pronounce them accurately
- Begin to use a dictionary to look words up and find meaning
- Use cognates and familiar language to help deduce meaning

Writing
- Experiment with the writing of simple words
- Write simple words and phrases using a model
- Write some phrases from memory
- Develop an awareness of sound spelling link to be able to write with increasing accuracy from memory

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
- Personal pronouns I, you, it, they
- 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

P.E.

Athletics
To challenge ourselves in running, jumping and throwing tasks
To accelerate over short distances.
To run and jump using one-footed take-off.
To use a sling action to throw a discus.
To run on a curve and exchange a baton in our team
To apply the skills we have developed in a competitive way

Gymnastics 2
To perform a weighted bunny hop showing control and balance.
An arabesque balance and over-the shoulder roll.
To identify and engage core muscles for stability.
To smoothly transition from a front support to side support.
To perform a shoulder, stand with control.
To combine all elements of this unit, showing smooth transitions.

P.S.H.E.

Relationships
- To explain who is in their family, while recognising families are different
- To begin to understand the basic changes that happen during puberty
- To begin to understand menstruation

If covering FGM lessons:
- To understand aspects of discrimination
- To understand that every individual no matter what their gender should be treated with equal respect and opportunities

If NOT covering FGM lessons:
- To explore how dementia affects the whole family
- To explore how assistive technologies can help people living with dementia

R.E.

- L2.6 Why do some people think that life is like a journey and what significant experiences mark this?

This investigation enables pupils to learn in depth from different religious and spiritual ways of life relating to milestones on the journey of life. Through exploring baptism, Bar and Bat Mitzvah or Hindu Samskaras and marriage pupils explore how and why people chose to mark significant moments in life.

Pupils will:
• Recall and name some of the ways religions mark milestones of commitment (including marriage) (A1).
• Identify at least two promises made by believers at these ceremonies and say why they are important (B1).
• Suggest why some people see life as a journey and identify some of the key milestones on this journey (A2).
• Describe what happens in Christian, Jewish, and/or Hindu ceremonies of commitment and say what these rituals mean (A3).
• Suggest reasons why marking the milestones of life are important to Christians, Hindus and/or Jewish people (B2).
• Link up some questions and answers about how believers show commitment with their own ideas about community, belonging and belief (C1).
• Explain similarities and differences between ceremonies of commitment (B3).
• Discuss and present their own ideas about the value and challenge of religious commitment in Britain today (C2)