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| **Year – 4** | **Local Area - Milton Keynes Canals**  | **Summer 2** |
| **ROOTS Link**: Take Care | **Whole School Project**: | **Ignites, Trips, Visits & Visitors**: * **Canal Walk** (Parks trust property) children investigate the canal, it’s route and bridges and locks along its route (CAUTION - WATER RISK ASSESSMENT REQUIRED)
* **Stoke Bruerne Canal Museum (Northampton)** The museum tells the story of why and how the canals were built (CAUTION - WATER RISK ASSESSMENT REQUIRED)
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| **Vision**: The children will look in depth at the local area and how the canal has had an impact on the local area and Britain as a whole. They will explore the reasons for its construction and how its uses have changed from years ago to today, where it is mainly used by leisure traffic. In addition, they will explore water safety, the water cycle and the issues of trade and commerce over 100 years ago. We will explore how we can look after this local resource and hone our geography skills by reading maps recording what we see on local walks.  | **Key Texts**: **Wind in the Willows** (TBC) |
| **History/ Geography** |
| **NC Links** | **Knowledge** | **Skills** |
| * Geography KS2 - name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics.
* Geography KS2 - use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied
* Geography KS2 understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom
* History KS2 - a study of an aspect or theme in British history that extends pupils’ chronological knowledge beyond 1066
* History KS2 understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region in North or South America
 | * To know how the Grand Union Canal supports/supported the infrastructure of Milton Keynes.
* Plot the distance from Great Linford Primary School to the nearest point of the Grand Union Canal.
* To know the purpose and function of a canal lock.
* The Grand Union Canal stretches 220km and has 166 locks.
* To recognise and record the human traffic in the local shop over a period of one hour.
 | * Accurately use a compass to identify the eight points of a compass.
* Find locations and feature of unknown area using four figure map grid references.
* Identify tourist and leisure symbols of an Ordnance Survey maps
* Conduct observational study of use of local amenities (shops).
* Record finding in bar chart drawing simple conclusions.
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| **English** |
| **Writing Focus**: Chronological explanation texts about the history of canals**Purpose and audience:** To explain how or why. In this case to give a detailed, chronological information about canals to people either wanting to know more or people who know a little – not experts.**Cold Write**: Autobiographical writing?**WAGOLL**: Pie Corbett Explanation Model**Hot Write**: The History of Stoke Bruerne | **Short Bursts**:  | Diary entry as person living on canalPostcard/Letter to friend explaining about life on the boatExplanation - the water cycle |
| **NC Links** | **Knowledge (Grammar)** | **Skills (Punctuation, Composition)** |
| **Plan**:* discussing writing similar to that which they are planning to write in order to understand and learn from its structure, vocabulary and grammar
* discussing and recording ideas

**Draft and write**:* composing and rehearsing sentences orally (including dialogue), progressively building a varied and rich vocabulary and an increasing range of sentence structures
* organising paragraphs around a theme
* in non-narrative material, use of subheadings

**Evaluate and edit**:* assessing the effectiveness of their own and others’ writing and suggesting improvements
* use of pronouns in sentences
* proofread for spelling and punctuation errors
* read their own writing aloud to a group or the whole class, using appropriate intonation and controlling the tone and volume so that the meaning is clear
 | Have a firm understanding of expanded noun phrases to describe and specify [for example, the blue butterfly]Start to use brackets to add additional information or provide explanations.Use of temporal connectives, e.g. *first, then, after that, finally.* Use of causal connectives, e.g. so, *because of this.*Some children begin to use subordinate clauses to add additional detail. Understand the following terms:* determiner
* pronoun
* possessive pronoun adverbial
 | Impact on reader:* A title that shows what you are explaining
* Are images, diagrams or charts required?
* Use the first paragraph to introduce

Punctuate sentences with different forms: statement, question, exclamation, command. Commas are almost entirely accurate when writing lists or using fronted adverbials or subordinate clauses. Are able to vary sentence openers with fronted adverbials used to create variation in writing. Confident use with possessive apostropheBrackets and parentheses used. |

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| **Speaking & Listening** |
| **Speaking & Listening** | **Debating** |
| * Listen to information, work out which elements are key and make relevant, related comments
* Infer meanings, reasons and make predictions
* Able to use a series of questions to keep a conversation flowing
* identify clearly when they haven’t understood/can’t remember specific vocabulary and can ask questions to clarify their understanding
* Use complex grammar and sentences effectively to clarify, summarise, explain choices and plan
* Tell a story with a good structure and a distinct plot, including an exciting event with a clear resolution and end point
* Able to discuss cause and effect
 | * Able to sustain a conversation by giving reasons and explaining choices and views
* Able to take on group roles to discuss with peers
* Able to identify and reflect on key points of what they have just been told
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| **Spelling & Phonics** |
| **NC Links** | **Knowledge** | **Skills** |
| * Spell most words correctly from the year 3 and 4 spelling list including:
 | Know spellings with following rules:* Suffix ‘ous’
* Prefixes ‘un-’, ‘dis-’, ‘in-’,
* ‘re-’, ‘sub-’, ‘inter-’, ‘super-’, ‘anti-’, ‘auto-
* Suffix ‘-ly’ added to words ending in ‘y’, ‘le’ and ‘ic’
* Recap x1 spelling rule from summer 1
* Statutory word list (see NNS grid – Summer 2)
 | * prefixes and suffixes to spell longer words and change the meaning of those words.
* Singular and plural possessive use of apostrophe
* learn the difference between:

accept/except, affect/effect, ball/bawl, berry/bury, brake/break, fair/fare, grate/great, groan/grown, here/hear, heel/heal/he’ll, knot/not, mail/male, main/mane, meat/meet, medal/meddle, missed/mist, peace/piece, plain/plane, rain/rein/reign, scene/seen, weather/whether, whose/who’s |
| **Handwriting** |
| **NC Links** | **Knowledge** | **Skills** |
| Pupils should be taught to (statutory)• use the diagonal and horizontal strokes that are needed to join letters and understand which letters, when adjacent to one another, are best left un-joined • increase the legibility, consistency and quality of their handwriting.Non statutory:Handwriting should continue to be taught, with the aim of increasing the fluency and improved composition | * Letters are joined using cursive style. Capitals are never joined.
* increase the legibility, consistency and quality of their handwriting
 | * Pencil is held in a controlled manner and child can write for extended period of time without stopping. Writing is neat across a range of subjects (including maths)
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| **Science- Looking at States** |
| **Enquiry Questions**:  |   | **Key Vocabulary**: * Boiling point – temperature at which a liquid turns to gas
* Boiling – when a material reaches a certain temperature it bubbles
* Condensing – process when a gas turns to liquid
* Freezing – liquid turns to a solid
* Gas – a material that fills the entire space available
* Solid – a material that cannot change shape
* Thermometer – a device for measuring temperature
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| **NC Links** | **Knowledge** | **Skills** |
| **Work scientifically by**: * asking relevant questions
* setting up simple practical enquiries
* making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers

**Materials:** * compare and group materials together, according to whether they are solids, liquids or gases
* observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)
* identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature
 | *Children will learn about states of matter. They will compare and group materials, observe changes in materials when heated or cooled and learn about the water cycle. .*OL: Can I compare and group materials together? OL: Can I explain why materials melt and when they melt?OL: Can I explain how materials change state when they freeze or melt? OL: Can I identify the part played by evaporation and condensation?OL: Can I explain the role of condensation and evaporation in the water cycle?STEM links:water company visit sewage treatment study | * To ask simple questions and recognise that they can be answered in different ways.
* To observe closely, using equipment such as rulers, thermometers etc.
* To perform simple tests and recommend adjustments that can be made
* Ask relevant questions using different methods of scientific enquiry
* Make suitable predictions
* Make observations and explain how materials have changed
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| **Music – Folk Music** |
| **Termly Focus**:  | **The Aqueduct Song (Long Way Down) / 36 Miles from the Sea**One of the many canal boat songs sung from 1800s onwards. The songs are similar to folk/sea shanties with repetitive chords and structure.  | **Key Vocabulary**:  |  percussion, tuned, un-tuned, structure, texture, timbre, pace (tempo), dynamics, pitch, score, duration, melody, rhythm, syncopation, scale, drone, pentatonic, ostinato, phrase. |
| **NC Links** | **Knowledge** | **Skills** |
| *Pupils should be taught to sing and play musically with increasing confidence and control. They should develop an understanding of musical composition, organising and manipulating ideas within musical structures and reproducing sounds from aural memory.* Pupils should be taught to:* play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression
* improvise and compose music for a range of purposes using the inter-related dimensions of music
* listen with attention to detail and recall sounds with increasing aural memory
* use and understand staff and other musical notations
 | Understand the effect of different patterns of music.Understand how time values change the style of a song. Know how the hand signs to stop and start as well as signals for how to get louder and quieter.Understand how pitch changes from low to high depending on the size of chime bar.Know how dynamics can affect the mood of a piece of music.Understand that notes have different durations that they can be played for and how these can be put together to create a melodic ‘phrase’,Know how to use two hands when playing a melody on chime bars.Know how to discuss music and be able to compare styles of live and recorded music. | * Create melodic and rhythmic phrases and combine them using the pentatonic scale/drone/ostinato
* Can organise sounds into simple structures (AB/ABA)
* Can layer, combine, select timbre duration and pitch of sound
* Can create and notate melodic questions and answer phrases and combine them with drones/ostinato
* Can explore sounds within a scale or restricted set of notes e.g. BAG or CEG or DEGAB with the addition of some accidentals
* Can improvise rhythmic patterns more confidently with use of more time values and rests and some syncopation
* Can suggest ways in which music might be improved by referring to pitch, pace and dynamics plus the selection of sounds (timbre), their combination (texture) and their organisation (structure)
* Can use timbre to select, sequence, combine and organise sounds into simple graphic scores
* Become familiar with the timbre of percussion
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| **Computing – programming sequences**  |
| **NC Links** | **Knowledge** | **Skills** |
| ●Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts●Use sequence, selection, and repetition in programs; work with variables and various forms of input and output●Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs●Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information | This unit is the first of the two programming units in Year 4, and looks at repetition and loops within programming. Pupils will create programs by planning, modifying, and testing commands to create shapes and patterns. They will use Logo, a text-based programming language. There are two Year 4 programming units: * Programming A – Repetition in shapes
* Programming B – Repetition in games
 | OL: can I program a computer by typing commands?OL: Can I explain the effect of changing a value of a command?OL: Can I use a count-controlled loop to produce a given outcomeOL: Can I use a template to create a design for my programOL; can I write an algorithm to produce a given outcomeOL: can I test my algorithm in a text-based language |
| **RE – Prayer and Worship (Christianity focus)** |
| **NC Links** | **Knowledge** | **Skills** |
| See RE guidance non-statutory 2010 | * Understands that a church is the main place of worship (name the key parts of a church and look at churches from around the world to make comparisons)
* Understand that prayer can take place in any place and not just in a church
* Understand that different places around the world worship in different ways (song/dance/silent prayer)

  | OL: Can I explain the main features of a church?OL: Can I compare churches from different places around the world?OL: Can I explain how Christians believe that prayer can take place in any location around the world?OL: Can I explain different ways people may worship and celebrate Christianity around the world? |

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| P**SHE – Changing Me** |
| **NC Links** | **Knowledge** | **Skills** |
| See non-statutory guidance NC | **Focus: -*** Know that change happens and is a part of growing up.
* To know they can speak to adults who they trust for advice and support about changes that are happening or may happen in the future.
 | OL: Can I explain that everyone is unique and special?OL: Can I express how I feel when changes happen?OL: Can I explain and respect the changes that I see in myself?OL: Can I understand and respect the changes that I see in other people?OL: Can I explain who to ask for help if I am worried about change? |

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| **Art – Be a Designer**  |
| **NC Links** | **Knowledge** | **Skills** |
| * KS2 - use sketchbooks to review and revisit ideas
* KS2 - to improve their mastery of art and design techniques, including drawing with a range of materials
* KS2 - to improve their mastery of art and design techniques, including painting with a range of materials
* KS2 - about great artists in history
 | **Focus: -** * Know that the Victorians imported goods from around the ‘Empire’ and used the canals to move them from place to place and that logos were used to express wealth or sophistication.
* Study the works of LS Lowry, an artist famous for painting cityscapes in industrial Britain.
 | *As part of the art unit the children will investigate different logos to be used on the canals (lessons 1-3) and create their own Lowry sketch of the canal basin in Northamptonshire (or local area sketch)*  |

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| **PE – Games (Net Games – Tennis)** |
| **NC Links** | **Knowledge** | **Skills** |
| * use running, jumping, throwing and catching in isolation and in combination
* play competitive games, modified where appropriate [for example, badminton, basketball, cricket, football, hockey, netball, rounders and tennis], and apply basic principles suitable for attacking and defending
 | To know that their bodies adapt when taking part in physical exercise.To know the role of blood in carrying oxygen to muscles as part of respiration (science link)To understand that they can manipulate the direction of a ball by altering angle of racquet, position of feet and speed of strike. | To apply racket skills into small-sided competitive games. To practise and improve accuracy and control of racket skills. |

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| **Maths Decimals & Money (measure)** |
| **NC Links** | **Knowledge** | **Skills** |
| Statistics* Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs
* Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs

Geometry* Identify acute and obtuse angles and compare and order angles up to two right angles by size
* Identify lines of symmetry in 2-D shapes presented in different orientations
* Describe positions on a 2-D grid as coordinates in the first quadrant.
 | Statistics:* Know the names of different charts and graphs and what they are used for
* Be able to spot errors or anomalies within data
* Be able to recommend the best method of presenting data.

Geometry:* Know the terms quadrilateral, triangle (including the different types), circle and pentagon.
* Can explain the different quadrilaterals.
* Know the term rotate, reflect, symmetry (and symmetrical)
* Knows what a quadrant is
 | Statistics:OL: Can I interpret charts? (recap)OL: Can I compare different charts and their sum? OL: Can I use and interpret a line graph? (new)OL;Geometry:OL: Can I identify right angles in shapes?OL: Can I compare different types of angles?OL: Can I recognise and escribe 2d shapes?OL: Can I name and describe the properties of triangles?OL: Can I describe the position of a shape on a grid? |