**Computing** –iCompute (Programming)

* 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.

**Art/Design Technology** – William Morris

Pupils should be taught:

* to create sketch books to record their observations and use them to review and revisit ideas
* to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials (for example, pencil, charcoal, paint, clay)
* about great artists, architects and designers in history.

**Science** – Teeth & Eating

**Curriculum link** – Animals (including humans)

**Topic summary** - This half term children learn about digestion and different types of teeth, before moving on to explore deadly predators and their prey, in their exploration of food chains. They work scientifically throughout the topic, using enquiry, practical experiments and hands-on research to answer questions and investigate how we eat, why we eat and what we eat.

The children will;

* ask relevant questions and using different types of scientific enquiries to answer them
* set up simple practical enquiries, comparative and fair tests
* make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
* gather, record, classify and present data in a variety of ways to help in answer questions
* record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
* report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
* use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions identifying differences, similarities or changes related to simple scientific ideas and processes using straightforward scientific evidence to answer questions or to support their findings.

Local Victorians

Year 4

National Curriculum

Spring 2018

**History** - Local Victorians

“A study of an aspect of history or a site dating from a period beyond 1066 that is significant in the locality / a significant turning point in British history.”

* to develop a chronologically secure knowledge and understanding of British history.
* to gain and deploy a historically grounded understanding of abstract terms such as ‘empire’, ‘civilisation’, ‘parliament’ and ‘peasantry’.
* to understand historical concepts such as continuity and change, cause and consequence, similarity, difference and significance, and use them to make connections, draw contrasts, analyse trends, frame historically -valid questions and create their own structured accounts, including written narratives and analyses.
* to make historical claims, and discern how and why contrasting arguments and interpretations of the past have been constructed.
* to gain historical perspective by placing their growing knowledge into different contexts, understanding the connections between local, regional, national and international history; between cultural, economic, military, political, religious and social history; and between short- and long-term timescales.

**Music** -

* to sing and play musically with increasing confidence and control.
* to develop an understanding of musical composition, organising and manipulating ideas within musical structures and reproducing sounds from aural memory.

**Cross curricular English links**

* The Power of Reading (Street Child)
* Non Chronological Report Writing (History & Science)

**British Value Links**

* Listening to the views of others (RE)
* Showing initiative (Art/ DT)
* Respect for institutions and services (Science)

**Cross curricular Maths links**

* Chronology (History)
* Statistics (Science)

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| **PSHE:** Dreams & Goals (All British Values Covered) |

**PE** – Swimming (Teaching provided by Liverpool Aquatic Centre)

The children should be taught to swim competently, confidently and proficiently over a distance of at least 25 metres, use a range of strokes effectively [for example, front crawl, backstroke and breaststroke], perform safe self-rescue in different water -based situations.

**English** (Power of Reading – Street Child by Berlie Doherty)

**Writing Outcomes**:

Rewriting parts of the narrative as a play script, Recounts (diary entries), Writing in role (choice of form and audience), Persuasive letter, Newspaper report writing, Character profile, Poetry,

**NC links**Reading (Word reading / Comprehension):

* Read and discuss a wide range of fiction
* Read books that are structured in different ways
* Identify and discuss themes and conventions
* Discuss understanding and explore meaning of words in context
* Ask questions to improve understanding
* Draw inferences such as inferring characters' feelings, thoughts and motives from their actions and justifying inferences with evidence
* Identifying how language, structure and presentation contribute to meaning
* Discuss and evaluate how authors use language
* Participate in discussions about books, building on their own and others' ideas and challenging views
* Explain and discuss their understanding of what they have read.

Writing (Transcription / Composition):

* Plan writing by identifying the audience for and purpose of the writing, selecting the appropriate form
* Note and develop initial ideas, drawing on reading
* Draft and write by selecting appropriate grammar and vocabulary
* In narratives, describe settings, characters and atmosphere, integrate dialogue to convey character and advance action
* Use a range of devices to build cohesion within and across paragraphs
* Evaluate and edit by proposing changes to vocabulary, grammar and punctuation
* Proof read for spelling and punctuation errors
* Perform their own compositions, using appropriate intonation, volume, movement so that meaning is clear

**Speaking and Listening:**

Maintain attention and participate actively in collaborative conversations, responding to comments about the text. Ask relevant questions to extend their understanding and build vocabulary and knowledge. Listen and respond appropriately to adults and peers. Articulate and justify answers and opinions. Use spoken language to develop understanding through speculating, imagining and exploring ideas. Participate in discussions, presentations, performances and debates. Consider and evaluate different viewpoints, attending to the contributions of others. Select and use appropriate registers for effective communication. Use spoken language to develop understanding through imagining and exploring ideas in discussion, role- play and drama.

**Grammar & Punctuation:**

* Co-ordinating & subordinating conjunctions
* Past & present perfect tense
* Nouns/pronouns – reduce repetition
* Time/cause – conjunctions, adverbs & prepositions
* Fronted adverbials
* Commas
* Apostrophes – reinforce contraction and introduce possession
* Direct speech and related punctuation

**Mathematics  
Number - multiplication and division**Pupils should be taught to:

* recall multiplication and division facts for multiplication tables up to 12 × 12
* use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers
* recognise and use factor pairs and commutativity in mental calculations
* multiply two-digit and three-digit numbers by a one-digit number using formal written layout
* solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects

**Number – fractions (including decimals)**Pupils should be taught to:

* recognise and show, using diagrams, families of common equivalent fractions
* count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
* 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
* add and subtract fractions with the same denominator
* recognise and write decimal equivalents of any number of tenths or hundredths
* recognise and write decimal equivalents to a quarter, a half and three quarters
* find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths
* round decimals with one decimal place to the nearest whole number
* compare numbers with the same number of decimal places up to two decimal places
* solve simple measure and money problems involving fractions and decimals to two decimal places.

**Measurement**Pupils should be taught to:

* read, write and convert time between analogue and digital 12- and 24-hour clocks
* solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.