

Y6 A Prehistoric Puzzle Learning Sequence

Synopsis: Children investigate life in Britain from the Stone Age through to the Iron Age. This in-depth study should explore different aspects of life in that time and could include a local study eg Skara Brae. Children write a biography detailing the works of Charles Darwin or Mary Anning. They could also write a narrative, skilfully interweaving character, setting and plot.

In **Science**, children study evolution and inheritance.

In **History**, children explore narratives both within and across periods, examining continuity and change.

In **Art**, children emulate cave art using drawing and painting skills.

In **D&T**, children plot the ‘evolution’ of various technologies eg phone, and create their own prototypes.

In **Computing**, children use a range of search technologies, being discerning about reliability of results.

Curriculum areas: English, Science, History, Art, D&T and Computing

Length of theme: 6 weeks

English

Write a biography of Charles Darwin or Mary Anning.

English Objectives

Comprehension

- Retrieve, record and present information effectively from non-fiction books
- Continue to read/discuss an increasingly wide range of challenging stories, poems, plays, non-fiction and reference books, myths, legends and fairy stories

Grammar & Punctuation

- Use hyphens to avoid ambiguity
- Use a wider range of cohesive devices
- Identify formal/informal structures
- Use active/passive voice for effect

Text Structure & Features

- Reflect understanding of audience and purpose through choice of

English Learning Sequence

- Recap what is meant by a biography and its features: recounts someone’s life, chronological order, factual, formal
- Discuss biographies children have read – what did they learn about the person?
- Collate real examples of biographies, drawing on children’s interests eg football, music
- Examine the style of these, commenting on level of formality. How could they be adapted to create a more informal tone?
- ‘Zoom in’ on Charles Darwin (covered in Science) and research his life using a range of sources including books and the internet – what do they want to find out about him?
- Record key facts about Darwin in order to use them in the biography
- Compare and share key facts to reinforce what has been learnt

grammar, vocabulary and structure

Plan, Draft, Edit & Evaluate

- Use dictionaries to check the spelling and meaning of words
- Identify audience and purpose of writing
- Note and develop initial ideas drawing from reading
- Select appropriate grammar and punctuation and understand how these can change/enhance meaning
- Assess effectiveness of own and others' writing
- Propose changes to grammar, punctuation and vocabulary to enhance meaning/effectiveness
- Ensure correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing and choosing the appropriate register (formal/informal)

In addition to the above, teachers should apply general spelling rules and guidance, as listed in [English Appendix 1](#) and ensure concepts and skills outlined in [English Appendix 2](#) are also addressed.

- Create timeline of Darwin's life, adding key images, words and phrases and dates
- Use timeline as structure for each paragraph of biography
- Consider cohesive devices to link within sentences (conjunctions) and between ideas and paragraphs (adverbials, phrases and subordinate clauses)
- Plan and draft each paragraph using cohesive device to link each
- Edit and redraft to produce final biography

English

Write a narrative, skillfully interweaving character, setting and plot.

English Objectives

Comprehension

- Predict what might happen from details stated and implied
- Infer characters' feelings, thoughts and motives and justify using evidence
- Evaluate authors' use of figurative language and consider effect on the reader
- Identify and discuss themes and conventions in and across a wide range of writing with identification of viewpoint developed through close reference to the text

Grammar & Punctuation

- Use hyphens to avoid ambiguity

English Learning Sequence

- A suggested stimulus for this unit is Ted Hughes' *The Iron Man* but schools may choose an alternative
- Look at title and/or front cover and predict what the book is about. Read the blurb – does this change their prediction in any way?
- What is the genre? What are the themes? How does the author develop character and setting? How effective is it?
- Read the opening chapter together and discuss author technique. What do we learn about the central character/s? What do you think about the writing style?

- Use a wider range of cohesive devices
- Use the semi-colon, colon and dash when writing lists or as the boundary between independent clauses

Language & Vocabulary

- Develop characters, settings and atmosphere using language and vocabulary from reading/books
- Integrate dialogue to advance action and convey character
- Become familiar with the language of writing, eg figurative language, imagery, style and effect
- Evaluate how authors use language and the effect on the reader

Text Structure & Features

- Summarise and present familiar stories in their own words
- Reflect understanding of audience and purpose through choice of grammar, vocabulary and structure
- In fiction, consider how authors develop character and setting
- Be exposed to a wide range of books including fiction from literary heritage

Plan, Draft, Edit & Evaluate

- Use dictionaries to check the spelling and meaning of words
- Identify audience and purpose of writing
- Note and develop initial ideas drawing from reading
- Select appropriate grammar and punctuation and understand how these can change/enhance meaning
- Assess effectiveness of own and others' writing
- Propose changes to grammar, punctuation and vocabulary to enhance meaning/effectiveness
- Ensure correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing and choosing the appropriate register (formal/informal)

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- Based on the first chapter, predict what might happen next
- Explain that we are going to adapt parts of the text to create more vivid images - how can we do this?
- Recap figurative language learned to date: similes, alliteration, metaphors, personification, oxymoron etc.
- Use images of the settings/characters to create a vivid description using figurative language - what information is mentioned explicitly in the text and what is inferred from the clues the author has given the reader?
- Grammar sessions: hyphen to avoid ambiguity. Children create compound adjectives and nouns in their description
- Grammar session: recap punctuation to date, ensuring children are familiar with colons, semi-colons, hyphens, parenthesis. Practise using these at sentence level
- Look at the other characters in the chosen book eg Hogarth, Space-Bat-Angel-Dragon and the interaction between them
- Consider use of dialogue to convey character and move action forward
- Act out key scenes from the book, using dialogue to reflect plot and character
- Write these scenes using conventions of speech
- Using plot and characters of book as inspiration, children plan their own narrative, perhaps writing a sequel/prequel etc.
- Consider how to interweave character, setting and plot and ensure they use a wide range of sentence types, punctuation and cohesive devices
- Draft, edit and redraft to produce final piece

Science

Study evolution and inheritance.

Science Objectives

Scientific Knowledge

- Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago
- Recognise that living things produce offspring of the same kind but normally offspring vary and are not identical to their parents
- Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution

Science Learning Sequence

- Set up a Game of Life/Survival of the Fittest in the classroom where children have to look at clues to do with adaptation and answer series of questions. How have animals /plants evolved to suit their environments?
- Discuss and define key terms eg evolution, adaptation
- Link to work of Charles Darwin and his theory of evolution. Examine the finches and explain adaptations
- Carry out similar activity for plants, looking at reasons for adaptations and explaining these scientifically
- Examine examples of fossils and explain what they tell us
- Look at inheritance in context of own families
- Create a family tree adding photographs if possible
- Find out what is meant by inheritance – which characteristics are inherited and which are environmental?
- Do a Self Study where children use photographs of themselves and add inherited/environmental characteristics all around
- Zoom out to look at offspring in other species and how we can manipulate the outcome of reproduction eg cross-breed dogs like cockapoos. What are the benefits? What are the dangers?

Geography

Explore narratives both within and across periods, examining continuity and change.

History Objectives

- **Construct informed responses that involve thoughtful selection and organisation of relevant historical information**
- **Develop perspective and judgement by weighing evidence and sifting arguments**
- **Explain why contrasting arguments and interpretations of the past exist**

History Learning Sequence

- If possible, set classroom up as Stone Age scene (foil river running through room, plastic trees, berries etc) and cover tables with black sheets to make 'caves'. Stick Stone Age clues and cave art pictures under tables and let children explore with torches – where are we in History?
- Give children images, dates, key vocabulary to use to generate

- Establish clear narratives from within and across periods by using secure chronological understanding
- Analyse trends, looking at continuity/change and similarity/difference/significance and use them to make connections and draw contrast
- Examine different aspects of history in different contexts
- Develop and apply a range of historical vocabulary

historical questions about Stone Age – can they place on a timeline? Discuss what is meant by ‘pre-historic’ How do we know anything about this period?

- Explore 4 key periods in turn: Mesolithic, Neolithic, Bronze Age, Iron Age. Decide on which aspects to research eg food, homes, weapons, implements
- Consider what was happening in the wider world at the same time
- Use a range of sources to research, looking at continuity and change over this period of history
- Offer suggestions for why change occurred eg hunter-gatherers became farmers, wolves were domesticated etc
- Sift and weigh evidence looking at different interpretations of past and determining reliability
- Carry out a local study of Skara Brae and what the discovery tells us about life in Neolithic Britain
- Create a micro-timeline of Mesolithic period to Iron Age, adding key facts and information and highlighting similarities and differences

Art

Emulate cave art using drawing and painting skills.

Art Objectives

- Capture artistic processes in sketchbooks
- In drawing, use a wide range of pencils to develop a personal style, drawing on work from other artists for inspiration
- In painting, combine colours, tones and tints to enhance mood
- Use wide range of artistic vocabulary to evaluate own work and communicate own ideas/comment on artworks
- Master art/design techniques with a wide range of materials
- Communicate ideas and comment on artworks using artistic Language

Art Learning Sequence

- Look at examples of cave art and discuss using artistic language. What do they depict? What do they tell us about life in the Stone Age? Which materials and media did they use?
- Emulate examples using pencils in sketchbook and annotate with comments about the work
- Drawing on historical knowledge, children plan their own cave art example – what will it depict? Perhaps it can demonstrate the changes from Mesolithic period to Iron Age?
- Collate range of images to use as inspiration eg wolves, birds of prey, fish

- Master painting skills and techniques to create cave art, preferably producing this on a wall rather than paper. Ensure colours reflect Stone Age examples
- Where possible, children use natural materials as well as paint eg beetroot dye
- If on paper, children could display these in a 'cave gallery' using tables and sheets and invite other children to come and view using torches

D&T

Plot the evolution of various technologies eg phone, and create their own prototypes.

D&T Objectives

- Making connections to real & relevant problems, apply understanding of electrical systems
- Use research to inform innovative design and generate own design criteria
- According to their functional properties and aesthetic qualities, select from and use a wide range of tools, equipment, materials and components accurately to make high quality prototypes
- Explain and understand how key events and individuals in D&T helped to shape the world

D&T Learning Sequence

- Research a range of products and technologies that have evolved over time eg camera, phone
- Create a timeline of chosen product, adding dates and information about each stage of its development
- Suggest reasons for the evolution and difference in design eg *we are now more mobile and global citizens so mobile phones are now essential*
- Consider how chosen product will advance and develop further in the future
- Explain that children need to draw on their understanding of electrical systems to create prototype
- Create design criteria and design product for the future, drawing on research
- Children may choose to carry out some market research to aid this process
- Using design as guideline, children create a prototype to 'pitch' in a Dragons' Den-type activity where the best concept/idea wins
- Focus on functionality and aesthetics
- Research key individuals in the world of design eg James Dyson, and their impact on the wider world

Use a range of search technologies, being discerning about reliability of results.

Computing Objectives

- Use the opportunities computer networks offer for communication and collaboration
- Appreciate how results are selected and ranked and use this to retrieve accurate content
- Be discerning in evaluating the reliability of digital content

Computing Learning Sequence

- Provide a range of digital content sources and have children rank them in terms of content, quality and accuracy, explaining reasoning
- Discuss importance of filtering and monitoring tools on a school network and Internet with reference to different types of social media