

**Mathematics** - Pupils become *fluent in the fundamentals*; rapid and accurate recall with varied opportunities to apply to problems. Pupils can reason mathematically using mathematical language and solve problems.

- Number, place value and rounding, number sense
- Mental and written addition and subtraction
- Mental and written multiplication & division
- 14<sup>th</sup> February - **Maths Focus Day**
- Fractions & decimals
- Measurement: area and perimeter, sledge weight, distances, times
- Mental calculation: all four operations
- Geometry: properties of shape, position and direction, navigation, pack ice drifting
- Statistics - sledging rations, temperature

**History** - Pupils can ask perceptive questions, **think critically**, weigh evidence, sift arguments and develop perspective and judgement of an element of British past and that of the wider world.

- A study of a theme of British history that extends pupils' chronological knowledge beyond 1066 - The Heroic Age of Antarctic Exploration (End of 19<sup>th</sup> Century)

**English** - Pupils can speak and write fluently to **communicate their ideas and emotions**. Clear, accurate and coherent writing in a range of styles to be elicited from written tasks linked to personal experiences, experiences of others, real events, poetry and the use of role play. Through reading in particular, pupils have a chance to develop culturally, emotionally, intellectually, socially and spiritually. A love of reading is promoted and nurtured.

- Syllabic poetry: haikus, tankas, cinquains - **The Aurora Borealis**
- Information texts: **polar animals**
- Formal/informal: **letter home Vs letter to King**
- Chronological Reports: **Captain Scott**
- Fantasy Fiction: **The Snow Spider**
- Persuasive writing: **Global Warming**
- Debate and presentation (speaking and listening)
- Spelling, vocabulary, grammar, punctuation and glossary to be integrated throughout and contextualised within chosen units

**PE**

- Dance, gymnastics, tennis and hi-5.

**Computing**

- Cracking Codes
- Developing a Game

**Geography** - Pupils gain knowledge, curiosity and fascination of the physical and human processes in an extreme environment with a deep understanding of the Earth's key physical and human processes

Locational Knowledge: **Where are the Polar Regions?** Including latitude, longitude, hemispheres, climate, time.

Human and Physical: **What is it like to live there?** Including economy, glaciers, tundra, climate change, iceberg/landmass, the water cycle and Antarctic Treaty.

Skills and Fieldwork: **Can we become Polar Explorers?** Including using maps/ atlases (1914 and today - link to exploration), compass direction, keys, compare to locality.

**Science** - Pupils work *scientifically* by asking questions, observing systematically, performing practical enquiries, recording, reporting, evaluating and concluding their findings using scientific explanations and evidence which link back to the enquiry focus; analysing the outcomes.

Opportunities to gain scientific knowledge and conceptual understanding:

- **Animals including humans** - nutrition and diet, calorie consumption (foods) and energy used
- **Forces and magnets** - magnetic poles, friction
- **Living Things & their Habitats** - grouping and classifying living things, using keys, changing environments & the impact on life, comparing the local and wider environment, life cycles, life processes in plants & animals.
- **Evolution & Inheritance:** The work of David Attenborough, adaptation, evolution, fossils, the Ice Age.
- **States of Matter** - Solids, liquids and gas, heating and cooling, reversible/irreversible, the water cycle.
- **Earth and Space** - movement of earth, daylight hours at the south pole at different times of the year.

**RE**

- Who's your hero? What are the qualities needed to be a 'hero'. Can one person change the world? How? *Enquire and Explore:* 'And the nominations are.....' St Augustine, William Tyndale, Mary Slessor, William Wilberforce, Eric Liddell, Jackie Pullinger, William Carey, Benedita da Silva, Archbishop Desmond Tutu. **How did they make a difference? How can we?**
- Pillars of Islam. **What is a 'pillar' and what is it for?** Why are the pillars so important?
- Easter

**PSHE**

What qualities might a polar explorer have? What should we value about ourselves? How do polar explorers survive? (*Keeping healthy*). How do we cope with tricky challenges? Choices and challenges. **Can we use our Fruity Thinking skills?** Finally we will be considering topical issues including the ethics of zoos, the Antarctic Treaty plus caring for our environment. Rights and responsibilities.

