Term 1 &2 Year B

Widening Perspectives

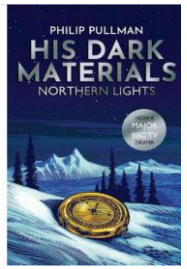
Joyce Class

Are we born to explore?

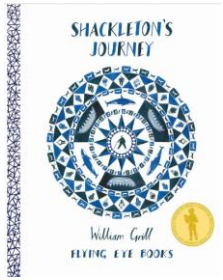
Does extreme exploration need leaders?

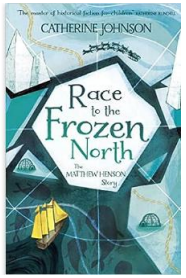
Mastery Learning Invite parents and carers to an exhibition to share our survival guide on extreme exploration

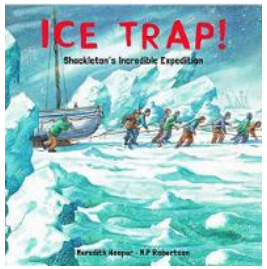
Class Novel

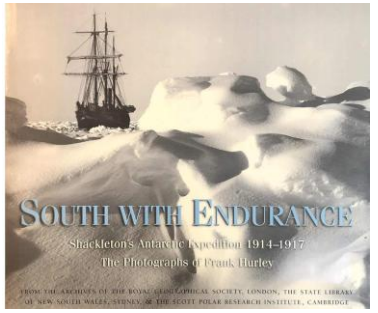


Core reading









Broader reading

Dark Materials Trilogy
The Polar Bear Explorer Club – Alex Bell
Into the White – Joanna Grochowicz
Shakleton's Navigator – Frank Worsley
Sky Song – Abi Elphinstone
Survivors – David Long
North Child – Edith Pattou
Leila and the Blue Fox – K Millward Hargraves

Narrative Hook

People Shackleton and the 27-man team.
Place Weddell Sea off Antarctica on 21 November 1915
Problem Let's say....you have been are in a team of explorers attempting to make the first land crossing of the Antarctic continent.
Possibilities The Endurance is stuck in the ice...what next? What drives people to explore the uninhabited extremes of the polar regions and space? What attitudes and dispositions are needed for survival or success?

Significant individuals

Ernest Shackleton, Matthew Henson, Ada Blackjack, Isobel Wylie Hutchinson,

The collection of work will become a survival guide for extreme exploration.

Use William Grill's 'Shackleton's Journey' and the issues in this illustrated story alongside source documents as a starting point to question the concept of leadership and teamwork, the wonder and fragility of the ecosystems at the poles and the threats to them, the adaptations the plants and animals have that enable their survival. Use ideas of biomimicry to design polar clothing.
Compare and contrast: 1909 Matthew Henson's journey as first black man to reach North Pole; 1920 Ada Blackjack as only survivor of Wrangel Island expedition.
Compare and contrast Lyra's aptitude for leadership and drive for exploration.

Resources web

www.spri.cam.ac.uk
Shackleton 100
Royal Museums Greenwich rmg.co.uk
Ernest Shackleton's Endurance Crew - British Trans-Antarctica Expedition 1914-17 (coolantarctica.com)
Education Center | Polar Bears International (webcams of bears, northern lights; stem on polar bear movement, adaptation, food webs; threats to Arctic)
Ada Blackjack
Matthew Henson
Encounter edu: frozen seas
Apollo 13

Let's Explore

Shakespeare's Henry V: teamwork and leadership. How does this align with our values? Committing to the journey (compare to Shackleton).
Using the text, evidence and analysis; making trebuchet, thinking as a group; before the battle of Agincourt, making dens, using text to build compassion.; making bow and arrow

Content
What will we learn?

English
- Writing to persuade – sales brochure for The Endurance; letter of application; swing tag
- Writing to inform – polar bear report; recipe of polar snacks; swing tag
- Writing to entertain - Explorer/story retelling; poem
- Writing to discuss – written at end: do we need leaders?

History of exploration – race, gender and wealth

Geography

Physical features of the polar regions – climate and ecology of the Arctic and Antarctica. Investigate and map polar regions; latitude and longitude; poles and equator, hemispheres effect of night and day, seasons in different hemispheres. Climate change threats.

Human features of the polar regions: indigenous people and how they have adapted to the polar environment. Compare their lives to our own.

Science

How are animals adapted to life in the South and North Poles? look at Polar Bears in N and penguin in the S. Identify how animals and plants are adapted to suit environment and that adaptation may lead to evolution.

The Human Body: the cardiovascular system and the effect of extreme cold environments on the body, heart and circulation. Healthy eating and the requirement of a balanced diet, but consider appropriate nutrition and the specific diet of an explorer in Antarctica. Design and make a high energy snack for an extreme polar explorer.

Insulation experiments: explore thermal insulating properties of different materials and use knowledge of animal adaptation in polar regions and biomimicry to design and make an item of polar clothing.

Art & Design

Skills: sewing, threading needles, colour contrast and blend, compostion design, stitches (blanket, French knot, applique, running)3D materials, fine line drawing, mark making, water colour wash, varying pressure with colour pencils for effect, illustration, visual literacy in graphic design, composition, securing with wire, perspective

Materials: fabric, thread, colour pencil, acrylic paint, scissors, extra fine brushes, pen, water colour,

IT

Using word, photography and Picolage to design sales tag.

Creativity
How will we show we know in multiple ways?

Survival Kit in style of Mimi Grey. exaggerated writing in style of survival guide to holiday incident. Account of own 'extreme' exploration and instructions on how to survive .

Letter of application for Endurance expedition – with biographical details, write in role as one of the successful applicants to Shackleton's advert.

Diary of Midwinter's Day Endurance is trapped in the ice.
Ilustration inspired by Hurley's photography and William Grill.

Cartoon strip of Matthew Henson's story & illustrated story of Ada Blackjack.

Recipe for extreme Explorer snack – backed with suitability testing, taste test, etc

Produce informative swing-tag insulating polar accessory (wrist warmers, neck warmer or hat) that incorporates elements of biomimicry and explains and promotes what has been designed and made. Graphic Design of label layout.

Embroidered Explorer Polar patch that references achievements of one of explorers studied.

Iceberg drawings using equilateral triangle, tessellation, mark-making, water colour sea background.

Designing and sewing fleece thermal mittens. Using embroidery.

Let's Explore – use Henry V to examine qualities of leadership and teamwork. Key Speeches, tennis ball trebuchets, tents at Battle of Agincourt, feelings and leadership.

Snowflake Christmas Baubles using mathematical compass circles, fine cutting skills, white contrast acrylic fine Nordic-inspired patterning.

Christmas Wreath making using natural hedgerow foraged greenery.

Community
Where are the links to local expertise and resources?

Leadership and teamwork.
Let's Explore: Shakespeare
Mountaineering
Antarctic Treaty

Compassion
What opportunities are there to teach compassion?

Life of indigenous populations of Arctic Regions.

Emotional and physical impact of extreme exploration.

The responsibilities of leadership and teamwork.

Co-operation on global scale for conservation of planet.

Understand the impulse for exploration past and present and impact on populations and planet