

# **Spirit of Exploration - extra resources**

<u>Teacher submitted resources</u> - remember - if you've got additional lesson ideas/resources - please share them with other teachers via uploading them to the relevant topic folder in this Google Drive^. And visa versa - feel free to check the link in case another wonderful teacher has uploaded some cool content!

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#### Here are the 'extra resources' available in this document:

### • Shackleton's Team (30 minutes)

Explore Shackleton's team and expedition, and how survival in Antarctica has changed over time

### • Create an explorers diary (30 minutes)

Learn about a historical expedition to Antarctica, and write about it as if you were there

### • Shackleton Quotes (20 minutes)

Read through Shackleton's quotes, what they mean today and write your own

### • Navigating by the stars (45 minutes)

Learn about traditional Polynesian navigation, and how to read the stars to find South

# Make a magnetic compass (15 minutes)

Make a small magnetic compass

### • Finding your way at sea - modern techniques (1 hour)

Learn about latitude and longitude and use real data from Australian icebreaking ships to graph movements

### • Early and modern explorers food (1 hour)

Learn about the different types of food taken on Antarctic voyages, experiment with food in cold temperatures and plan meals for an Antarctic expedition

# Hillary's Hut – Antarctica Virtual Reality Experience

Antarctic Heritage Trust invites you to explore Sir Edmund Hillary's Antarctic hut through a new, ground-breaking virtual reality experience.

In partnership with Auckland University of Technology (AUT) the Trust has developed this virtual reality experience to celebrate New Zealand's first presence in Antarctica.

Find out more.



# Shackleton's Team (30 minutes)

Looking through old photos of Shackleton's expedition, consider the different roles of the team members involved, what it would take to survive in Antarctica and the differences between early and current expeditions.

Check out page 17 of the Chilled resource to find out more.

## Create an explorers diary (30 minutes)

Research Shackleton, Scott or Hillary's expeditions to Antarctica. Imagine you are a scientist on the expedition with them. Create a diary entry and include the weather, what you had to eat, and what you did that day in history!

This activity was taken from page 18 of the Chilled resource.

# **Shackleton Quotes (20 minutes)**

Look through the Shackleton quotes provided, and use the prompts to have a class discussion about the man, the journey and what they mean today.

You might like to have students consider what quotes they like to live by, or what words of their own might be famous 100 years from now.

Check out page 18 of the Chilled resource to find out more.

# Navigating by the stars (45 minutes)

Traditional Polynesian navigation - also called non-instrument navigation or wayfinding - means finding your way without any of the tools modern navigators use. No GPS, no compass, no radio or satellite reports.

Check out <u>this video</u>, showing a brief history of Polynesian explorers, and some of the amazing methods they used to find their way across the oceans. These included ocean currents, stars, clouds and animals. You can find more details about these techniques <u>here</u>.



In this activity, students learn the cardinal points of the compass. They also learn how to use the Sun and star constellations – the Southern Cross and the Pointers – to identify the cardinal compass points. Find out more <a href="here">here</a>. After learning about how to find South, have your students try it out for themselves at night and report back to the class.

## Make a magnetic compass (15 minutes)

Make your own magnetic compass by following the instructions on page 4 of this <u>Matariki</u> <u>learning resource</u>.



# Finding your way at sea - modern techniques (1 hour)

In this <u>set of resources</u> students can learn about latitude and longitude and how they are used to plot positions on the Earth's surface. Using real data from Australian ships, students can create and interpret distance time graphs, and investigate how icebreaker ships work. Finally have fun creating a hypothetical rescue scenario and use graphs and positional data to explain how the rescue takes place.

# Early and modern explorers food (1 hour)

A vital part of exploring is - you guessed it, food! Check out this lesson plan by our friends at the <u>International Antarctic Center</u> in Christchurch, which covers what early explorers ate, has some practical experiments to see what cold temperatures do to food, and helps students plan an Antarctic exploration survival kit. You might like to create another with students to help them with planning for their own exploration call to action. You will need the <u>Survival in Antarctica handout</u>, and the <u>Field box food contents handout</u>.

Check out this link to find some Antarctica meals from the time of the early explorers. There are even recipes if you want to cook them yourself.