On board the Endeavour

Students explore what it was like to live in the cramped below-deck quarters, including what a typical daily diet was for different parts of the crew; and how the diet impacted their health.

Year Level: F–2

- Maths
- HASS
- Health and PE
On board the Endeavour

OVERVIEW

In this learning sequence, students investigate what it would have been like on board the Endeavour.

They compare past and present ways to explore and travel by making links to their own experiences. Students will consider how changing technology has affected the ways we move around the world, including the time taken and facilities available to us.

Students measure out the Endeavour outline on a playground and explore what it would have been like to live in the cramped below-deck quarters, including what a typical daily diet was for different parts of the crew, and how the diet impacted their health. They will compare their own diets to the meals that were available on the Endeavour.

Finally, students demonstrate their learning through a role-play activity.

LEARNING OUTCOMES

For the students to describe what it would have been like on board the HMB Endeavour.

For the students to consider changes in the world.

LEARNING AREAS

<table>
<thead>
<tr>
<th>Maths</th>
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<td>HASS</td>
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<td>Health and PE</td>
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DURATION OF LESSONS

5–6 lessons
## Australian Curriculum

### HUMANITIES AND SOCIAL SCIENCES – YEARS F TO 2

- The representation of the location of places and their features on simple maps and models *(ACHASSK014)*
- Explore a point of view *(ACHASSI005, ACHASSI022, ACHASSI038)*
- Compare objects from the past with those from the present and consider how places have changed over time *(ACHASSI006, ACHASSI023, ACHASSI039)*
- How changing technology affected people’s lives (at home and in the ways, they worked, travelled, communicated and played in the past) *(ACHASSK046)*

### HEALTH AND PHYSICAL EDUCATION – YEARS F TO 2

- Identify actions that promote health, safety and wellbeing *(ACPPS006)*

### MATHEMATICS – YEARS F TO 2

- Measure and compare the lengths and capacities of pairs of objects using uniform informal units *(ACMMG019)*
- Describe duration using months, weeks, days and hours *(ACMMG021)*
Engage

Why do people explore?
Ask the students what it means to explore, and to make a list of the things an explorer might do.

Ask students if any of them have been on an exploring trip with their family. It may have been a trip away or a day out. Perhaps they explored a new part of a local park or beach or town.

Ask them:
- Where did you explore?
- Do you remember how you felt about the trip before you left home?
- How did it feel to explore the new place?
- What transport did you use?

Exploring Australia
Show the students a map of Australia. Ask what they notice about Australia, its size and shape.

Provide an outline of Australia for each student and pose the question: If we wanted to move around within Australia or leave Australia what sort of transport could we use? Ask the students to draw ways of travelling out of or within Australia.

Ask students to explain what types of transport they chose and why.

Who was Captain Cook and how did he travel to Australia?
Introduce Captain Cook to the students.

You may like to give an explanation or use a picture storybook or video clip. Meet Captain Cook, by Rae Murdie, gives a timeline of Captain Cook’s story with great illustrations. This is Captain Cook, by Tania McCartney, gives a timeline-style account of Captain Cook’s voyages, presented as a school play.

James Cook grew up on a farm in England and later became a seaman and joined the navy. He became a master mapmaker, and it was his job to explore the sea and map the countries he found. Ask the students why Captain Cook would have had to travel by sail.

When Captain Cook was exploring and mapping the world, people could not travel in the way we do now. Captain Cook travelled on a ship that belonged to the British Royal Navy. Cook’s ship for the voyage to Australia was Endeavour. It was made of different types of wood, with three masts, 28 sails and almost 30 kilometres of rigging. Its maximum speed was about 15 kilometres an hour, which is about the speed cars travel in carparks.

Ask the students what the Endeavour may have looked like.
If you have a whole-group discussion, note the student responses on the board. Alternatively, divide the class into groups and provide them with large pieces of paper. Ask each group to draw what the Endeavour would have looked like, and to jot down their notes in response to questions such as:

- What was the Endeavour made of?
- How did it move?
- What would happen to the Endeavour if there was no wind, or if there was a storm?
- There was no motor or engine on the Endeavour. What sorts of sounds would you hear on a wooden ship? What would you see, smell, feel?

You can look at a virtual tour of the Endeavour and learn about different aspects of the ship. This virtual tour provides information about some of the tools and equipment used.

**What was it like on the Endeavour?**

Watch the *Behind the news* clip about the replica of the Endeavour and ask students to think about the following:

- How many people travelled on board?
- How long were they on the ship?
- What do people need to stay alive for that time?
- What food and provisions did they take?

For further images of the replica of the Endeavour you could watch a virtual tour of the replica: [Captain Cook’s ship ‘Endeavour’](#).

Ask the students to identify the major challenges facing the crew of the Endeavour.
Explore

Students investigate what it would feel like to travel on board the Endeavour.

What would the crew need to take with them to stay at sea for more than a year? How would people survive on a ship for that long? Focus on the food that the people would have eaten and how it might have affected their health. What else would have an impact on their health?

Plate up

Look at examples of what students eat each day, and compare it with the food available on the Endeavour.

When the Endeavour left England, it was carrying 18 months’ worth of food for 94 people. This included pigs, chickens and a goat for milk. It also included several tons of sauerkraut (cabbage preserved in vinegar). Captain Cook knew that eating sauerkraut would stop the crew from getting scurvy. He also tried to get fresh fruit or vegetables whenever the Endeavour found land. The result: no-one on the ship got scurvy.

Hard tack was used instead of bread because it could be eaten years after being cooked. Traditionally, hard tack was baked until very dry and hard. The lack of moisture allowed it to keep for long periods of time. The crew would soak the pieces of hard tack in tea, coffee or soup to make it easier to chew.

Provide paper plates for the students to draw and/or write about an evening meal that they share with their families at home. If you also give them magazine or advertising material containing images of food or ingredients, students could use the images to create a collage on their paper plates.

As an extension idea, choose a menu and prepare a meal from the students’ examples. Plate it up and compare it to the type of food eaten on the Endeavour. Make some hard tack (see the following recipe). You might like to dip it in vegetable broth. Sauerkraut can be purchased in many supermarkets. Talk about what it would be like to eat sauerkraut every day.

Ask the students to describe a little more about the foods displayed on their paper plates. Where does the food come from? How is it stored? Is it the type of food you could take on an exploration? Why or why not?

Use more paper plates to show what people on the Endeavour would have eaten, compared to students’ examples. Think about the differences in the freshness, texture and colour of the foods.

Discuss why the people on the Endeavour would have needed to eat the food they did. Explain the need to be able to store the food for long periods without refrigerators. Imagine what it would be like to eat the same thing all the time.

As an extension idea, choose a menu and prepare a meal from the students’ examples. Plate it up and compare it to the type of food eaten on the Endeavour. Make some hard tack (see the following recipe). You might like to dip it in vegetable broth. Sauerkraut can be purchased in many supermarkets. Talk about what it would be like to eat sauerkraut every day.
Recipe for hard tack

**Ingredients**
- 2.5 cups plain flour
- 2 tsp salt
- 1 cup water
- extra plain flour

**Method**
Mix plain flour and salt.
Add water and knead together until you have a dough. If it is too sticky, add more flour.
Roll the dough with a rolling pin.
Cut into squares and use a fork to make lots of holes in the dough pieces. The holes allow the moisture to escape and the hard tack will last longer.
Bake in an oven at 190°C for about 30 minutes or until lightly brown. You can turn the pieces over and bake for another 30 minutes to make sure it is really dry.

Measure up
It was crowded on the Endeavour. Where did the people eat, sleep and work? What other things would be hard to do? The Endeavour was about 30 metres long and 9 metres wide at its beam. Using tape measures, measure and mark out the area of the Endeavour in the school yard. With younger students you could step out the length. Lengths of rope or boxes could also be used to mark out the ship outline. Now imagine what it would be like with students from four or five classes on board.
While everyone is standing in the Endeavour, think about how it moved. There were no motors and they did not use oars. The Endeavour had 28 sails. Is there any wind? Discuss what it would be like on board during a storm.
The students could move in ways to indicate being on board during a storm or high winds. You could use a sound recording of winds and storms or dramatic music to play as the students move. What about when there was no wind at all? What would that have been like?
You can explain to the students that there were different levels or floors on the Endeavour for storage, sleeping and eating. View the plans of the Endeavour.
The crew had to follow the orders of the captain. They were punished if they did not. Play ‘Ships ahoy’ on your outline of the Endeavour.
Explain that we are about to go on board the Endeavour and that there are lots of jobs to do. When Captain Cook shouts a command, everyone has to perform that activity.
- **Stern**: Go to the back.
- **Bow**: Go to the front.
- **Port**: Go to the left and look out.
- **Starboard**: Go to the right and look out.
- **Scrub the deck**: Get down on hands and knees and pretend to scrub.
- **Climb the rigging**: Climb up a rope or rope ladder.
- **Boom crossing**: Duck.
- **Captain's coming**: Stand to attention and salute.
The Endeavour departed from England on 25 August 1768 and arrived in Kamay (now known as Botany Bay), Australia on 29 April 1770.

Have the students think about what will be happening in 18 months’ time. How old will they be then? What will happen in that time? Think about significant events. Some students will have had two birthdays. There will be new classes and teachers. Imagine being on a boat with your classmates for 18 months. How would you feel on the day you left home? Would you feel different after a week, several months, a year on board the ship? Make a list of the feelings suggested by the students. What other times in their lives have they felt that way?

The people on board the Endeavour did not know what Australia would be like. Ask the students what they think Australia was like for the crew when they arrived. Look at the paintings from early Europeans.

The Eora people may have seen the Endeavour arrive in Kamay (Botany Bay). ‘Eora people’ is the name of the Aboriginal people from the Kamay (Botany Bay) area.

Watch ‘Australia before Endeavour’. The boats of the Eora people were different to the Endeavour. How and why were they different? What did the Eora people use boats for? What do you think the Endeavour would have looked like to them?

Look at Joseph Lycett’s painting of Aboriginal people spearfishing and diving for crayfish on the foreshore of Mulubinba (now known as Newcastle). What do you think would have been surprising for the First Peoples, when the Endeavour landed?

Provide materials for the students to draw, paint or write about what they think Australia was like for the crew when they arrived. Look at the paintings from early Europeans.

Explain
Discuss the topic of navigation with your students.

What tools do we use to find our way around (navigate)? The students may suggest using familiar systems such as mobile phone maps or other digital systems. Some may reference mapping systems used in cars, mentioning GPS. The global positioning system (GPS) uses signals from satellites in space to show our exact position on Earth. Today we tend to use mapping apps instead of paper maps.

Captain Cook was an expert mapmaker in his time. He was able to navigate in large stretches of water to places that had never been mapped. He used equipment such as the sextant. The sextant, which measures the height between the Sun and the horizon, helped Captain Cook know where his ship was on Earth.

When the Endeavour left Australia, Captain Cook had mapped most of the east coast. To learn more about what was achieved on this voyage watch ‘Chapter 2: The voyage’s accomplishments’ in HMB Endeavour’s voyage of exploration.

You can find images of Captain Cook’s maps and mapping equipment on the Australian National Maritime Museum website. Print a selection of items for the following activity.

Work with students to do a whole-class sorting activity. Discuss what the tools might be and how they might have been used, and invite students to explain their thinking. Ask students to identify items (using printed pictures) under the categories of maps and tools, and separate them into Captain Cook’s time and our time; for example:

<table>
<thead>
<tr>
<th>Captain’s Cook time</th>
<th>Our time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maps</td>
<td>Maps</td>
</tr>
<tr>
<td>printed map</td>
<td>a picture of a GPS map</td>
</tr>
<tr>
<td>Tools</td>
<td>Tools</td>
</tr>
<tr>
<td>sextant</td>
<td>surveyors at work</td>
</tr>
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</table>
Draw simple conclusions about life on board the Endeavour.

Students are to demonstrate their learning by presenting information in a role-play activity.

The students choose a crew member to be. They may be Captain Cook or the ship’s cook, a sailor, or an artist. Students could role-play meeting another crew member and introduce themselves.

You could use some simple dress-ups such as old shirts or vests to help the students get into character.

Before starting the dramatic play, as a group, share some questions the characters might ask each other.

Allow time for the students to plan their answers and record them as text or drawings. Include questions such as:

- What do you eat?
- Where do you sleep?
- What do you do on the Endeavour?
- How did you feel when you left England?
- What did you see when you arrived in Australia?

Observe children’s interactions during the play and prompt questions as required.