



SHIPWRECK AT THE BOTTOM OF THE WORLD

The Extraordinary True Story of Shackleton and the Endurance
Book by: Jennifer Armstrong

Tiered Assignment – Where on Earth is ...?

Objectives – Tiered Assignment

Students will know:

- the equator and the prime meridian divide the globe into four hemispheres
- geographic terms: hemisphere, equator, prime meridian, latitude, longitude, absolute location, and relative location
- every point on Earth has a specific location that can be determined by imaginary grid lines

Students will understand that:

- a map is a visual representation of geographic information
- maps are used to locate positions on the Earth's surface

Students will be able to:

- use the equator and prime meridian to identify the four hemispheres of the Earth
- distinguish between parallels of latitude and meridians of longitude
- locate places using latitude and longitude on maps and globes
- describe a location in relative and absolute terms
- utilize a compass rose to identify and make use of cardinal directions

Tiered Assignment – Where on Earth is ...?

Whole Class Activity:

Day 1: As a whole class discuss the definitions of relative and exact location. Use the school as an example for both ways of describing where something is located. Students will find the school address as the exact location and as a class will generate a description of its relative location – where the school is located in relation to other things.

Students will determine the relative and exact locations of their homes. As a class, discuss the benefits of each explanation. In what situation would it be best to use exact? Relative? Why would you use one over the other?

Give the exact location of where you live.

house number street name apartment #

city state country zip code

Give the relative location of where you live.
(Use terms like between, near, next to, across, beside...)

Day 2: Using a map of their state, ask students to determine relative and exact location for the town in which they live. Students will determine relative location using cardinal directions and exact location using lines of latitude and longitude.

Give the exact location of the city in which you live.

Longitude _____

Latitude _____

Give the relative location of the city in which you live.
(Use terms like east of, west of, north of ...)

Using these two assignments, as well as homework and exit cards from each activity, place students in three groups based on their readiness level for this subject matter. Each group will be working toward the same KUDs (listed above) but at varying degrees of difficulty.

Group One:

This group of students has been hired by the families of the crew members to try and locate Shackleton and his lost ship the *Endurance*. They have been sent coordinates of locations where the ship may be located as well as messages from people who last saw the ship and its crew. They will use these clues to mark the locations on a world map as they plan the route for the search party.



Dear Queen Alexandra,
 Approximately one month ago we had the pleasure of meeting Shackleton and his crew on the eastern coast of S. America. They had been sailing in the Atlantic Ocean for many months and decided to dock for a few days in Buenos Aires, a city in the eastern region of Argentina. We wish them all the best on their upcoming expedition.
 Yours truly,
 Ricardo Mendoza

Last Seen:
 50 degrees N
 0 degrees W

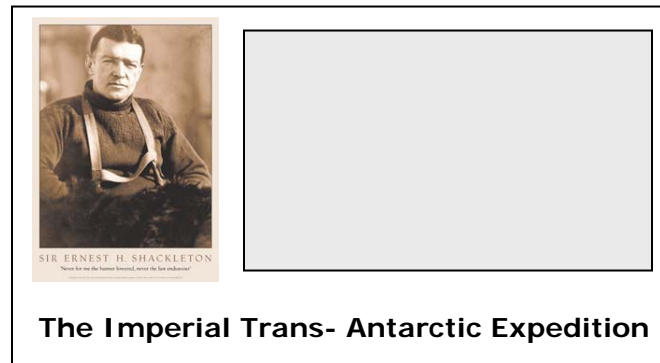
Group Two: Making a Route Map

Using the information from the text, Shipwreck at the Bottom of the World, students will act as historians; recreating a chronological journal of the crew’s voyage from their starting point in London, England to their final return to South Georgia Island a year and a half later. Each entry in the journal will have exact location points using latitude and longitude as well as an accompanying descriptor of their relative location.

Date	Exact Location	Relative Location
August 1, 1914	51 N 0 W	Located in the northwestern hemisphere, north of France and to the east of Ireland

Group Three:

This group has been hired by the Scott Polar Research Institute at the University of Cambridge to create a display for the opening of their new wing in honor of Sir Ernest Shackleton and his brave crew members. The institute would like to hang a large handmade map or globe in the entry way of the wing. The display must have the route of the expedition clearly marked with location names and latitude and longitude coordinates. They would also like a plaque to hang on the wall that clearly describes this heroic journey using relative information.



Assessment:

All students will be assessed on their ability to:

- accurately plot the longitude and latitude coordinates
- place the events in the correct sequence
- describe locations in relationship to other places
- produce professional quality work (neat, eye-catching, error-free)