



Letters to the Arctic - Teacher Guide

Note:

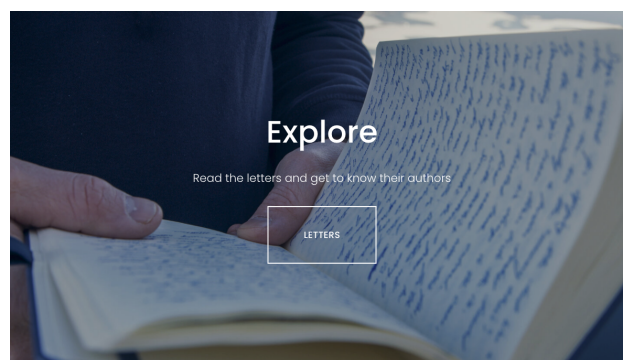
As a **pre-visit** activity, this lesson is a good way to hook students into the subject matter.

As a **post-visit** activity, students have the opportunity to hear from the scientists who took part in the MOSAiC expedition.

Setting the Stage

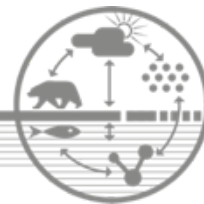
In this activity, students put themselves in the shoes of a scientist who works in a fragile and changing environment.

The film and multimedia project *Letters To The Arctic*, asked scientists to do a task that required them to wear more than just their scientist hats, and asked them to be a bit vulnerable and get personal.



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Instructional Overview	
Grade Level	Middle/High School
Instructional Time	60 minutes (<i>total time needed</i>)
Lesson Driving Question	How do scientists feel about the places they study?
Standards Alignment	NGSS Science is a Way of Knowing - Science knowledge is cumulative and many people from many generations and nations have contributed to science knowledge. NGSS <u>Science is a Human Endeavor</u>: - Scientists and engineers rely on human qualities such as persistence, precision, reasoning, logic, imagination and creativity.
What Students Will Do	- Watch a short video - Read letters from scientists addressed to the Arctic to explore what it means to be a scientist working in a fragile and changing environment. - Have an opportunity to write their own letters.
Materials	☐ Notebook paper ☐ Pencil/Pen/writing tool



	☐ Letters to the Arctic website ☐ Letters to the Arctic video (YouTube) ☐ Letter to the Arctic Submission
Material Preparation	☐ Test that the web links above load before the lesson.

Instructions

1. Access the website www.letterstotheartctic.com
2. Allow students to explore and read through the [About page](#) on the letters website.
3. Click on the tab The Film, and scroll down to watch the Short Film (5 min).
4. After watching the video, have students explore the Letters page where they can read some of the letters.
5. Students will select and read two letters written by scientists.
6. Have students respond to the following:
 - a. What words do the authors use to describe the Arctic?
 - b. What emotions does this letter evoke for you?
 - c. What are some reasons the scientists might have a complicated relationship with the Arctic?
 - d. Do you think the scientists' feelings impact why or how they do their science? Why or why not?
7. Ask students to Pair and Share what letters they read and what they thought was interesting about them.
8. Ask students to take 15 minutes to write their own Letter to the Arctic. *Tip: you can do this on the back of the MOSAiC postcards, please ask your facilitator for these ahead of time.*
9. Collect letters. If there are any letters that you would like to submit or students would like to submit, refer to the [Letters to the Arctic submission webpage](#), click the link for a form that a parent/guardian can sign and upload forms and letters to Google Drive.

Teacher note:

Lianna Nixon invites your students to share their letters to the Arctic with her so that she may add them to the [Letters to the Arctic website](#). The goal of this Letters to the Arctic community is to have it grow and add more letters that explore the Arctic and human relationships to this space. If there are any issues with submitting, please contact Lianna at lianna.nixon@colorado.edu