RESOURCE LIBRARY
ACTIVITY : 50 MINS

Community Consciousness

Students welcome the audience for their final presentations and introduce the _Climate Change Challenge_ unit by watching a video and discussing its relation to their work. Next, students present their climate data representations and pledges, asking for audience members' signatures. Finally, students reflect on their learning in the _Climate Change Challenge_ unit.

GRADES
6 - 8

SUBJECTS
Earth Science, Climatology

CONTENTS
1 Video, 3 PDFs

OVERVIEW

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For the complete activity with media resources, visit:

http://www.nationalgeographic.org/activity/community-consciousness/

In collaboration with

educurious
learning that connects

DIRECTIONS

This activity is part of the Climate Change Challenge unit.

1. Welcome audience members and introduce the Climate Change Challenge unit.

- As the audience settles into the classroom (or in another public space within the school, such as a hallway or cafeteria), hand out final products, assigning students to a presentation position within the space (see *Setup*).
- To introduce audience members to the Climate Change Challenge unit, and support students in feeling a sense of pride in their work, show the *Causes of Global Warming Explained* video (2:49) a second time.
- Ask students to help the audience members get an initial sense of their learning by answering the following questions:

    - *What are some examples of climate data that we examined during this unit?*
    - *What do you know about the effects of climate change on weather or on the ocean?* (If necessary, prompt students to consider their final products to answer these questions).

2. Facilitate final product presentations.

- Distribute one copy of the *Planet Pledge Collector* to each student.
- Prepare students and the audience for presentations by announcing the format:

    - Students accompany their products, using their representations of climate data and explanatory paragraphs to help convince audience members to commit to their Planet Pledge.
    - Audience members can sign and print their names on a student's *Planet Pledge Collector* to indicate their willingness to attempt abiding by the pledge in the coming months and receive support from the student.

- Encourage audience members to move around the room, listen to a student's short presentation, ask questions, decide whether or not to sign their pledge, and then move on to learn from additional students. It may be helpful to note that audience members should feel free to sign multiple pledges if they feel that the commitment is reasonable!
- Turn the "mic" over to students, and roam the room with audience members; you can pledge as well!

- After each student has presented and gained a maximum of six signatures, thank audience members for their time and ask students to return to their seats within the classroom.

3. Prompt students to reflect on the Climate Change Challenge unit.

- Collectively revisit the class *Know and Need to Know* chart. Students can now likely answer many of the questions they had at the beginning of the unit—celebrate their growth!
- Ask students to respond individually to the following prompts:

  - *What will you remember about examining climate data? Why?*
  - *What is the most important thing you learned during the Climate Change Challenge unit?*

- Distribute copies of the *Climate Change Challenge Collaboration Rubric* for students to assess themselves and/or peers on their collaboration skills throughout the unit.

Tip

A few days may be required to reach out to a school community audience ahead of time. You may consider inviting the same people students interviewed during the *Climate Questioning* activity.

Modification

If the classroom is too small to conduct student presentations comfortably, you may consider moving to a larger public space, such as a hallway or cafeteria. Leaving final products posted in a visible place may also help students and audience members be reminded of their commitments.

Rubric

Formally assess student outcomes using the *Climate Change Challenge: Final Product Rubric.*

Extending the Learning

Opportunity for Action: Students can distribute their Planet Pledge depictions in local businesses, and design an online platform to collect pledgers' information. They can track their own pledge progress and follow-up with others to ensure they have the necessary

information and motivation to keep their commitment to the pledge.

OBJECTIVES

Subjects & Disciplines

Earth Science

- Climatology

Learning Objectives

Students will:

- Present their climate data representation and pledge to an audience of non-scientists.
- Convince others of the impact and importance of climate change.
- Reflect on their learning in the Climate Change Challenge unit.

Teaching Approach

- Project-based learning

Teaching Methods

- Discussions
- Hands-on learning
- Reflection

Skills Summary

This activity targets the following skills:

- 21st Century Student Outcomes
  - Information, Media, and Technology Skills
    - Information Literacy
    - Information, Communications, and Technology Literacy

- - Media Literacy
  - Learning and Innovation Skills
    - Creativity and Innovation
  - Life and Career Skills
    - Initiative and Self-Direction
    - Leadership and Responsibility
    - Productivity and Accountability
- 21st Century Themes
  - Environmental Literacy
  - Financial, Economic, Business, and Entrepreneurial Literacy
  - Global Awareness
- Critical Thinking Skills
  - Analyzing
  - Creating
  - Evaluating
- Science and Engineering Practices
  - Constructing explanations (for science) and designing solutions (for engineering)
  - Obtaining, evaluating, and communicating information

National Standards, Principles, and Practices

COMMON CORE STATE STANDARDS FOR ENGLISH LANGUAGE ARTS & LITERACY

- **CCSS.ELA-LITERACY.SL.7.4:**
Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.

NEXT GENERATION SCIENCE STANDARDS

- **Crosscutting Concept 2: Cause and Effect:**
Cause and effect relationships may be used to predict phenomena in natural or designed systems.

- **MS-ESS3: Earth and Human Activity:**
 Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment

- **Science and Engineering Practice 6:**

Constructing explanations and designing solutions

- **Science and Engineering Practice 8:**

Obtaining, evaluating, and communicating information.

Preparation

What You'll Need

REQUIRED TECHNOLOGY

- Tech Setup: Color printer

PHYSICAL SPACE

- Classroom
- Meeting space

GROUPING

- Large-group instruction
- Large-group learning
- Small-group learning
- Small-group work

BACKGROUND & VOCABULARY

Background Information

For science to help individuals make better decisions, people need to be informed, and communication is a key part of the scientific process. Scientists communicate with each other and with the public in a variety of ways: they publish papers, give presentations, and use many other forms of media, such as television and magazines. For these reasons, many scientists spend time learning to communicate clearly and effectively by practicing their visual, written, and verbal skills. In the *Climate Change Challenge* unit, students participate authentically in the scientific process. As such, it is critical that they share their findings with others.

Young people are beginning to raise global awareness of climate change. Activists, such as teenager Greta Thunberg of Sweden, have spoken to audiences around the world. Power also comes in numbers; kids and teens are well represented at climate rallies. However, it's not necessary to hit the streets to make one's views known. Many youths use social media as a platform to demand action from decision-makers on climate change.

Prior Knowledge

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Recommended Prior Activities

- Adaptation and Mitigation
- Carbon All Around
- Circulation of the Seas
- Climate Questioning
- Global Trends
- Heating Up
- Local Emissions
- Meteorological Models
- Now and Then
- Ocean Acidification: The Evidence
- Oceanic Impacts
- Our Footprints
- Our Greenhouse
- Planet Pledge
- Plot It!
- Sea Level: The Evidence
- Sea Temperature: The Evidence
- Weather Interconnections
- Weather, Meet Climate

Vocabulary

Term	Part of Speech	Definition
carbon footprint	noun	total sets of greenhouse gas emissions caused by an organization, event, product or individual over a set period of time.

Term	Part of Speech	Definition
climate change	*noun*	gradual changes in all the interconnected weather elements on our planet.
global warming	*noun*	increase in the average temperature of the Earth's air and oceans.
pledge	*verb*	to guarantee or promise.

For Further Exploration

Instructional Content

- National Geographic: Resource Library: Collection: Climate Change
- National Geographic: Resource Library: Collection: Climate

NATIONAL GEOGRAPHIC