



Climate Change

Objectives

You will be able to

- Identify and explain ways that climate change affects plants, animals, and humans.
- Analyze data about the effects of climate change on the world around us.
- Construct an explanation linking the cause and effects of climate change.
- Make contributions to group discussions.
- Discuss with a partner the impacts of climate change on animals and the environment.



*How do we know
human activity is
influencing climate,
and what can we
do about it?*

Evaluation and Feedback

To evaluate your work, you will

- Use the “Analyzing and Interpreting Data” and “Constructing Explanations” rows of the Science and Engineering Practices Rubric.
- Use other criteria determined by your teacher.

Task 3: The Effects of Climate Change on Humans and the Environment

As a group:

- Rotate from station to station to analyze data found on resource cards about the effects of climate change on the world around us.
- Discuss the questions found at each station and write your answers in your science notebook.
- Share your thoughts with the class about the effects of climate change on animals, humans, and the environment.
- Explain one example of climate change impact from the chain of cause and effect involved in climate change.

Vocabulary

- cause
- effect
- extreme weather
- glacier
- impact
- production
- reasoning
- sea level
- wildfire

Connect to the Culminating Project

Organize your thoughts about your climate change presentation to the school board:

- Explain how you are affected by climate change in your life today.
- Describe how you might be affected by climate change in the future.
- Explain why it is important to mitigate climate change.

Introduction

We often hear in the news scientists claiming that changes in climate may significantly affect our lives and our environment in the future. So what does that mean exactly?

- Think about what you already know about climate change from the news or from friends and family. How do you think climate change can impact our lives? the environment? Record your ideas below.

Part I • Stations: Gather Information and Analyze Data

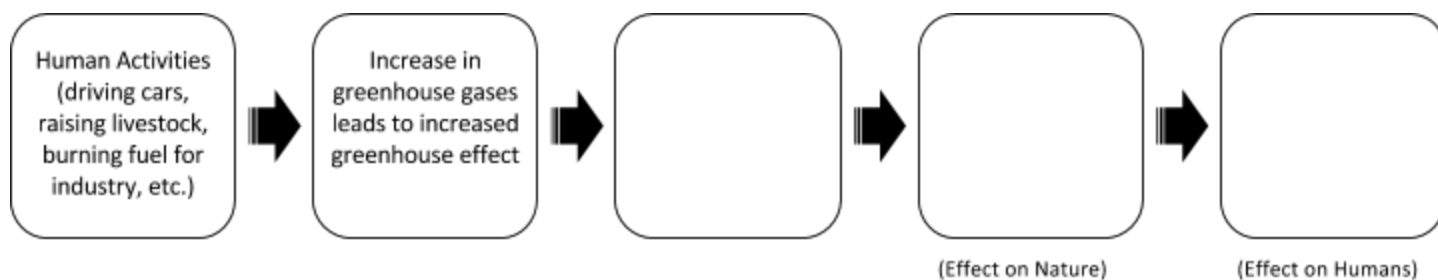
1. With a partner, move from station to station to learn more about climate change.
- At each station, look at the resource card, discuss the questions on the card, and take careful notes in your science notebook about what you saw, read, and discussed with your partner.
 - As you go through the stations, identify the cause and effect relationship you observe with each impact and record your thoughts in the table below. First record the cause (the impact); then record how the impact affects nature; and then record how the change in nature affects human communities.

Causes and Effects			
Station	Cause	Effect on Natural Systems	Effect on Human Communities
Station 1			
Station 2			
Station 3			
Station 4			
Station 5			
Station 6			

- After you have gone through all of the stations, discuss the following with your partner:
 - Explain the impacts of climate change on humans, animals, and the environment. Provide at least two examples.

Part II • Chain of Cause and Effect—An Example

- Choose one impact of climate change that you analyzed in the previous part. Complete the flowchart below using that impact to show how human activities can eventually lead to effects on human communities.



- In your group, brainstorm new words or connections that you want to add to the class concept map.



Reflect

- At the beginning of this task, you used your own prior knowledge to brainstorm how climate change can affect your lives and the environment. Look back at your ideas. After gathering and analyzing evidence today, how would you add to your ideas?
- In this task, you focused on the crosscutting concept of cause and effect, or how one event can lead to another. Give one example of how this crosscutting concept came up in today's task.

Part III • Connect to the Culminating Project and Assessment

Complete the Individual Project Organizer for this task.

