

2.5: Causes and Effects of Climate Change

Grades 10 – 12

Description: This activity will give students an opportunity to work alone and in groups to summarize what they have learned so far about climate change. Students use graphic organizers to identify the natural and human-induced causes of climate change and its effects on plants, animals, and humans.

Materials

- Handout (one per group or per student)
- Pens or pencils

Time: One class period (30 minutes)

National Science Education Standards

A1.D: Develop descriptions, explanations, predictions, and models using evidence

A1.E: Think critically and logically to establish the relationships between evidence and explanations.

AAAS Benchmarks

4B/M14: The Earth has a variety of climates, defined by average temperature, precipitation, humidity, air pressure, and wind, over time in a particular place.

4B/H5: Climatic conditions result from latitude, altitude, and from the position of mountain ranges, oceans, and lakes. Dynamic processes such as cloud formation, ocean currents, and atmospheric circulation patterns influence climates as well.

Procedure:

1. Hand out the sheet titled Climate change causes and effects graphic organizer (two versions are provided for you to choose from).
2. Ask students to quietly read the directions and begin filling out the sheet. Let them know that this is an activity for reviewing what they have learned and brainstorming what they will learn in the coming units, so they shouldn't be afraid of writing down what they think. If necessary review the differences between causes and effects.
3. After students have had some time to work on the handouts on their own, have them pair up and discuss their sheets with a partner. They can make changes to their sheets at this time.
4. Lastly, have the class work together as a whole to fill out the sheet. It would be helpful to have an overhead slide of the handout that you can fill in as a class. Student work should be saved in their portfolio.

Assessment

Have students write a letter to a government official explaining the evidence for climate change, its causes and effects. Students should use everything they have learned in unit 1 and unit 2 to answer the question.

Name: _____ Date: _____ Room: _____

Climate change causes and effects graphic organizer

Under Causes, write down what you think makes climate change occur. Under Effects, write what you think happens because of climate change. In the Questions area, note any questions you have, or things you would like to know about the causes and effects of climate change.

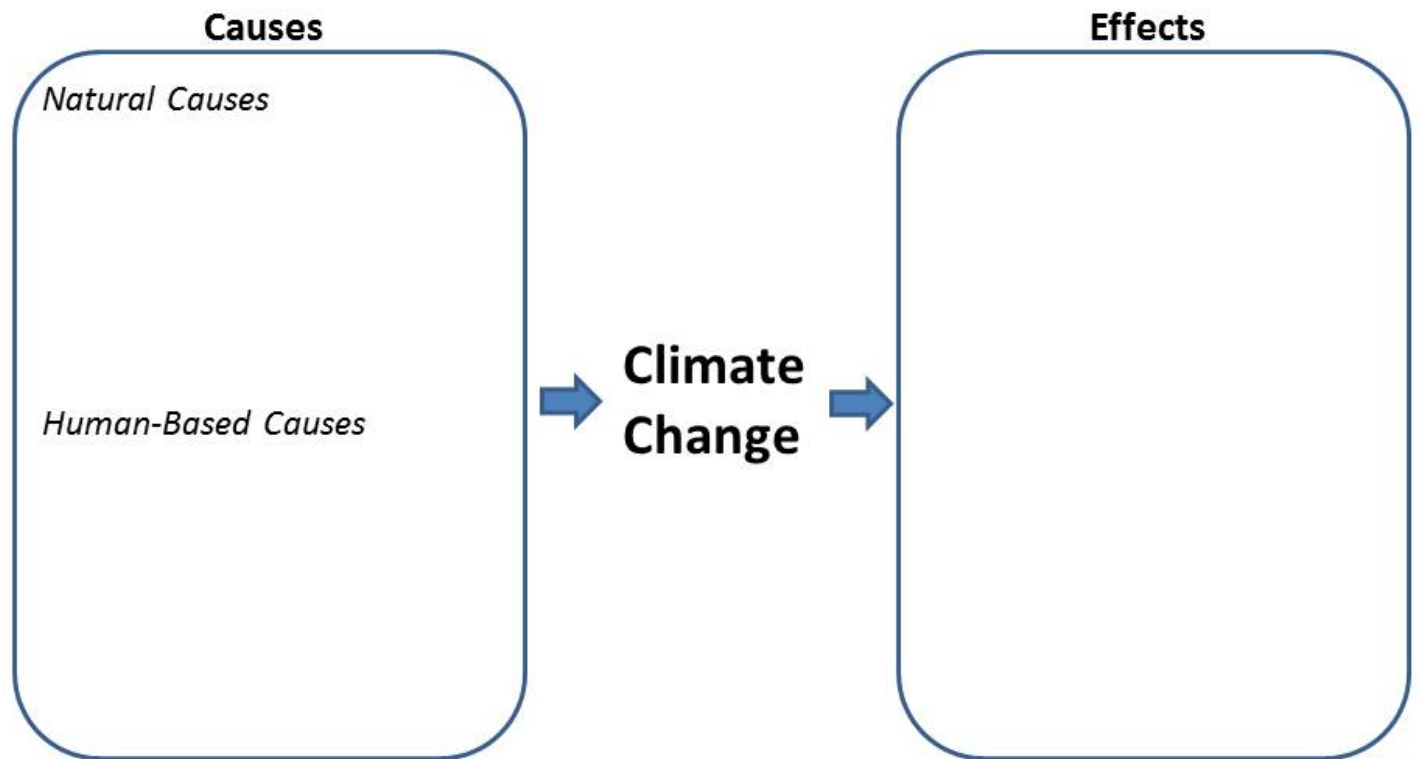
Causes		Climate Change		Effects
	➔		➔	

Questions

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Questions