

Activity 1.1: Accessing Prior Knowledge: Global Climate Change Survey

Grades 5 – 6

Description: Students identify the natural and human factors that they feel are causing global climate change. They provide possible solutions for mitigating climate change including a plan to reduce the impact their personal activities have on the environment.

Materials

- Climate change survey handouts
- Pencils or pens

Total Time: One 45-minute class period

Prior Knowledge

Students should know the difference between a **cause** and an **effect**. If they have not covered this recently, you may want to review the difference before starting the survey. These concepts are important to understanding survey questions.

National Science Education Standards

A.1.f Science as Inquiry, Understandings about Scientific Inquiry Science advances through legitimate skepticism. Asking questions and querying others' explanations is part of scientific inquiry. Scientists evaluate explanations proposed by other scientists by examining evidence, comparing evidence, identifying faulty reasoning, pointing out statements that go beyond the evidence, and suggesting alternative explanations for the same observations.

AAAS Benchmarks

12A/E2* Offer reasons for claims and consider reasons suggested by others. The main point to stress is that for any given collection of evidence, it is usually possible to invent different explanations, and it is not always easy to tell which will prove to be best.

Illinois State Standards

13.B.2f Analyze how specific personal and societal choices that humans make affect local, regional, and global ecosystems.

Guiding Questions:

- What is global climate change?
- Are climate and weather the same thing?
- What do you know and want to know about climate change?

Procedure:

1. Open a discussion with the students regarding their feelings on global climate change. Ask them: *Have you thought about climate change? What do you know about climate change? What would you like to learn about climate change?*



CHICAGO BOTANIC GARDEN

2. Have students complete the attached survey. This can be done as an independent activity or it can be led by the teacher reading each question and then allowing the students an opportunity to answer.
3. After students have completed the survey, discuss their responses as a class. You may want to go through each question and write down student responses on the board.
4. Completed survey handouts should be kept in student portfolios.



Name _____ Date: _____ Room: _____

Global Climate Change Survey

1. When people talk about climate change, what do you think they are talking about?

2. How worried are you about climate change?
(Circle the answer that best describes how concerned you are.)

Not worried at all Slightly worried Worried Very worried

3. Do you think the climate has always been the way it is now? Fifty years ago? One million years ago? Please explain your answer.

4. Please list five things that you can think of that could cause global climate change.

a. _____
b. _____
c. _____
d. _____
e. _____

5. What evidence have you heard for or against climate change?

6. Should we try to stop global climate change? Please explain.

Name _____ Date: _____ Room: _____

7. Where do you get most of your information about the environment? (Mark 1 by the most important, mark 2 by the second most important, down to 5 as the least important.)

_____ Talking with friends/family	_____ Mass media (TV and radio)
_____ Print media (newspapers, magazines)	_____ Internet
	_____ School

8. If global climate does change, do you think it will have a direct influence on your life?
(Circle one.)

Yes

No

9. Put a check next to anything you think CAUSES global climate change.

_____ Changes in temperature	_____ Extinction of plants and animals
_____ More greenhouse gases in the atmosphere	_____ Continental drift (moving continents)
_____ Deforestation (cutting down forests)	_____ Coal/oil burning
_____ Volcanoes	_____ Meat production/food choices
_____ Changes in the amount of precipitation (rain/snow)	_____ Ozone

10. Put a check next to anything you think is an EFFECT of global climate change.

_____ Changes in temperature	_____ Extinction of plants and animals
_____ More greenhouse gases in the atmosphere	_____ Continental drift (moving continents)
_____ Deforestation (cutting down forests)	_____ Coal/oil burning
_____ Volcanoes	_____ Meat production/food choice
_____ Changes in the amount of precipitation (rain/snow)	_____ Ozone