



Climate Change & Health

Student Data Collection Sheet

Think About It! Write your answers below:

Understanding Climate Change 	1. Before you start this lesson, what are your initial thoughts about climate change ?
	2. What is the difference between weather and climate?
	3. What has happened in the last 150 years to cause the climate to have higher average temperatures?
Climate, Health, and CDC 	1. Which people around the world will be most vulnerable to the health effects of climate change ? Why?
	2. In your community, which of the nine health effects of climate change presented do you think will have the greatest impact?
	3. CDC's BRACE framework is designed to help cities prepare for climate change instead of just reacting to it. What are some barriers or challenges that might make this process difficult?
Citizen Science 	1. The exhibition at the CDC Museum focuses on extreme heat, wildfires, and floods. Why do you think these three topics were chosen?
	2. Which health effect of climate change are you most interested in learning more about? Why does that topic interest you?
	3. Do you think that environmental justice can be achieved in the United States? Explain your answer.

Record Temperature Data

Insert your thermometers. Record your bottles' initial temperatures. Expose them to your chosen light source – either bright, direct sunlight or a 100W or brighter incandescent light bulb – and immediately start a timer. Record the temperature of both bottles every 20 seconds until they no longer change. The data table goes to 10 minutes, but once you've gotten three consistent temperatures in a row for both bottles, you can stop the experiment early. *Optional:* Consider repeating this experiment more than once. Multiple trials can add reliability to your data.

Experiment notes:

		Normal Air	High CO ₂
Time (min)	Time (sec)	Temperature (°)	Temperature (°)
0:00	0		
0:20	20		
0:40	40		
1:00	60		
1:20	80		
1:40	100		
2:00	120		
2:20	140		
2:40	160		
3:00	180		
3:20	200		
3:40	220		
4:00	240		
4:20	260		
4:40	280		
5:00	300		
5:20	320		
5:40	340		
6:00	360		
6:20	380		
6:40	400		
7:00	420		
7:20	440		
7:40	460		
8:00	480		
8:20	500		
8:40	520		
9:00	540		
9:20	560		
9:40	580		
10:00	600		



Reflections

Now that you have completed this investigation, think about what you learned from your research and experiment. Answer the questions below.

1. How are human activities driving **climate change**?

2. What 3 interventions would you provide to a community in an extreme heat emergency?

3. How has this lesson altered or confirmed your views about **climate change**?

4. A good rule of disaster planning is that it is generally less expensive to prepare for an emergency than it is to respond to one. How do you think this applies to **climate change**?

5. As sea levels rise due to **climate change**, people who live in island nations like Kiribati will face flooding with permanent loss of land. Do nations have a responsibility to take in climate refugees who lose their homes?

6. Should we focus more of our money and attention on addressing climate-related health equities for people in the United States or for people in developing countries? Why?
