**Activity 8**

**A Student’s Guide to Global Climate Change**

**Grade Level:** 5-8

**Time:** 60 minutes

**Learning Intention:** Students will understand what causes an overabundance of carbon dioxide in the atmosphere.

**Objectives:**

* Students will know how their personal actions/choices can be modified to lessen the amount of carbon dioxide in the atmosphere.

**Overview:**

A Student’s Guide to Global Climate is an online site created by the EPA that provides information on global warming and interactive activities for students to investigate just like a scientist would. The site also allows students to calculate their own “carbon footprint”.

**Materials Needed:**

* A student’s Guide to Global Climate Change, <http://epa.gov/climatechange/kids/index.html>
* Computer lab with Internet access
* Flash player installed on computers
* Student Activity Sheet

**Success Criteria:** We will know we are successful when we can describe the risks of global climate change and what humans can do about it.

**Activity:**

1. Pass out the student work sheet or have students copy it into their notebook.
2. Have students read access the webpage, <http://epa.gov/climatechange/kids/index.html> and watch the short video.
3. Have students go back to the home page and click on the See the Impacts link. Students should read the page and click on the second link, Check out how these changes will affect people and the environment. Students should choose one area to click on and get more information from, describe how it will be affected by climate change, and describe what people should do about it.
4. Have students click on the Think Like a Scientist link. Examine the Clues of Climate Change: Students will list the 11 clues that they find.
5. Finally, if students finish the task with time left over in the class, they can explore the site and/or calculate their emissions by using the emissions calculator on the home page.

**Closure**: Review success criteria.

**A Student’s Guide to Global Climate Change**

Directions: Go to the website <http://epa.gov/climatechange/kids/index.html> and follow the instructions to learn more about global climate change and what you can do to make a difference!

1. Before you begin your work with this webpage, watch the video on the homepage.

2. Click on the yellow link that says **See the Impact**.

3. At the bottom of the page, there are 8 links you can choose from to see different ways that climate change effects people and the environment. Choose one area to learn more about, click on the link, and write down what you learn.

In your own words tell What’s at stake and what people can do about it. There may be more than one thing at stake!

What’s at Stake

What can people do about it? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Be prepared to share your information with the class.

4. On the top of the webpage, find the trail of links that you went through and click back to the **home** page.

5. Click on the blue link that says **Think Like a Scientist**.

6. Click on the first link on this page that says **Examine the Clues of Climate Change.**

Using the picture of the landscape, find 11 clues of climate change and write them below.

* 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  7. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  9. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  10. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  11. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7. Go back to the **home** page and click on the link that says **Calculate your Emissions**.

8. Follow the instructions to calculate how much carbon dioxide you are putting into the atmosphere. When you are finished complete the information below.

What is the total amount of carbon dioxide you are saving a year?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

How many miles of driving a car is that equivalent (equal) to?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_