

### **High School Science Virtual Learning**

## Environmental Science Impacts of Greenhouse Effect April 27, 2020



### High School Environmental Science Lesson: April 27, 2020

### **Objective/Learning Target:**

Students will be able to describe the Impacts of Greenhouse Effect.



1. What is the greenhouse effect?

2. What types of gases contribute to the greenhouse effect?



1. The trapping of heat in Earth's atmosphere by gases known as greenhouse gases.

2. Carbon dioxide, water vapor, methane, etc.



### Lesson Activity:

### Directions:

- 1. Watch the video to review the Greenhouse Effect.
- 2. After watching the video, read the articles linked below and take careful notes over the different impacts of the greenhouse effect.
- 3. Create a memo that you can send out to your peers about the various impacts of the greenhouse effect. Your memo should be at least 5 paragraphs long and detail the effects of the greenhouse effect.

### Link(s):

<u>Video</u> <u>Article 1</u> <u>Article 2</u>



## Practice

# You will use the information from the activity on slide 5 to answer the following questions.



### **Practice Questions**

- 1. What are two current impacts of greenhouse gases we are already seeing?
- 2. What will temperatures due in response to greenhouse gases?
- 3. What does this temperature change do to winter?
- 4. What does this temperature change do to spring and summer?
- 5. What do greenhouse gases due to precipitation?



### Answer Key

Once you have completed the practice questions check with the work.

- 1. Two current impacts of greenhouse gases we are seeing are glaciers shrinking and tree's blooming earlier.
- 2. Temperatures will continue to rise due to greenhouse gases
- 3. Greenhouse gases will decrease the cold temperatures in winter causing less and less frost.
- 4. Greenhouse gases will increase the length of spring and summer causing an excessively long growing season.
- 5. Average precipitation has increased since 1900 due to increased greenhouse gases



## **More Practice**

You will use the information from the activity on slide 5 to answer the following questions.



### **More Practice Questions**

- 1. What effect does the greenhouse effect have on glacial masses?
- 2. What happens to species migration patterns in response to the greenhouse effect?
- 3. What are the various impacts on agriculture and livestock in response to the greenhouse effect?
- 4. What impact does the greenhouse effect have on humans?
- 5. Are there ways to help mitigate the effects of the greenhouse effect?



### Answer Key

Once you have completed the practice questions check with the work.

- 1. There is a thawing of glacial masses, which is reducing albedo and causing a global rise in sea level.
- 2. Species migration is impacted as species are being forced to migrate to survive the changes in climate patterns.
- 3. The impact of agriculture and livestock is that there are altered lengths to growing diseases as temperatures fluctuate, insect populations have increased, and invasive species are impacting the land dedicated to plants and livestock.
- 4. The impact on humans include food shortages, the production of food is lower than what is needed to feed everyone, and the spread of diseases and pandemics, allowing diseases to spread more easily and cause increased rates of infection.
- 5. Use renewable energy, use public transportation, recycling, reduce the consumption of meat and increase consumption of organic products, etc.



### Extra Resources

Here is another excellent reading over the greenhouse effect and its impacts: <u>Greenhouse Effect and Your Daily Life</u>

Here is more on the various impacts of the greenhouse effect: <u>Impacts of the</u> <u>Greenhouse Effect</u>

Still craving more information? Here is an excellent reading that will tell you some of that key information on the greenhouse effects impacts: <u>Greenhouse Effect's</u> <u>Impacts</u>