Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block \_\_\_\_\_\_\_\_

Go to: <https://www.esrl.noaa.gov/gmd/education/carbon_toolkit/basics.html>

1. Why do 99.9% of the Earth’s atmospheric gases exhibit almost no effect on the warming of the Earth’s atmosphere?
2. Why do the “trace” gases present a problem?
3. Which greenhouse gas is the most abundant? Why are scientists not concerned with this gas?

For each of the following, list WHAT they are, WHERE they are and HOW they affect climate.

Carbon Dioxide (CO2)

Methane (CH4)

Nitrous Oxide (N20)

**Draw** a diagram and **label** to EXPLAIN the greenhouse effect:

Explain how the Carbon Cycle is involved in global climate change.

How does deforestation increase the amount of carbon dioxide in the atmosphere? Explain.

How do the oceans absorb excess carbon dioxide from the atmosphere and how does this affect the oceans?

Explain how the industrial revolution has increased the amount of carbon dioxide in the atmosphere.

According to the graph, which country is the biggest contributor to global carbon emissions?