



# Collecting Data: CO<sub>2</sub>



Name \_\_\_\_\_ Class \_\_\_\_\_

Carbon dioxide is a **greenhouse gas** because it absorbs radiation and remains in the atmosphere for a long period of time. Amounts of CO<sub>2</sub> have dramatically increased since the Industrial Revolution. In order to understand changing levels of carbon dioxide in the atmosphere, NOAA's Global Monitoring Laboratory (GML) collects air around the world and measures the amount of carbon dioxide.

GML aims to collect air where there is less localized change in CO<sub>2</sub>. What can change the amount of CO<sub>2</sub> in the atmosphere?

**What are man-made sources of carbon dioxide INCREASE?**

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**What are natural sources of carbon dioxide INCREASE?**

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**What are sources of carbon dioxide DECREASE?**

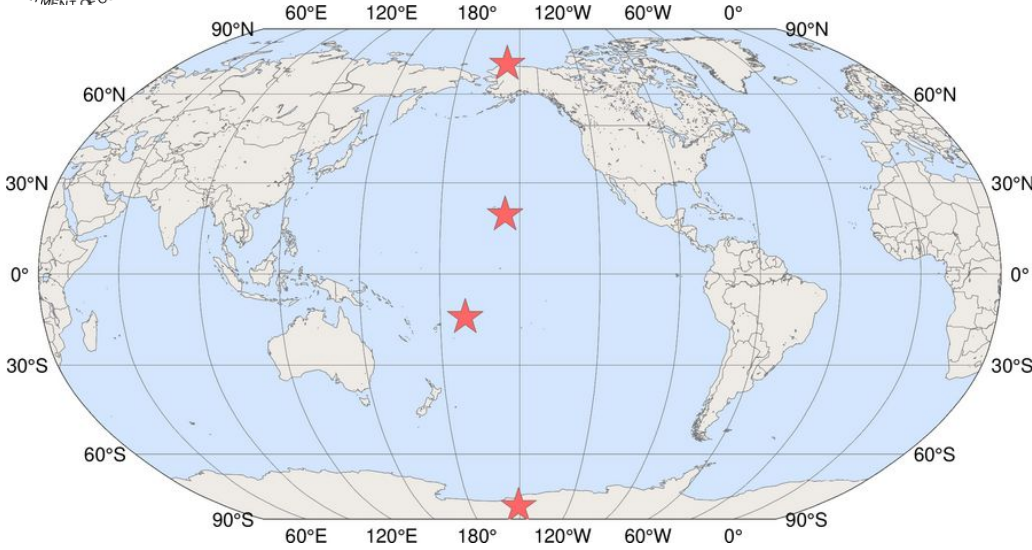
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The stars on the map show GML's four Observatory locations, sites where CO<sub>2</sub> is measured:  
**Utqiagvik, Alaska**  
**Mauna Loa, Hawaii**  
**American Samoa**  
**South Pole**

**Why do you think these locations were chosen?**

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NOAA has received more funding for a **new observatory** to monitor carbon dioxide! Where should the new observatory be? Think of a location that will add to our understanding of the amount of carbon dioxide in the atmosphere. Explain why you selected this new location.

**Location of Proposed New Observatory:** \_\_\_\_\_

**This will be an excellent location because** \_\_\_\_\_

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