Station 1
Global Temperature and Human Activities

Graphs #1 and #2 – Carbon Dioxide Variations

1. Do you observe a change in CO₂ concentrations in Earth’s atmosphere over time? Explain your evidence and specify years.
   • Brainstorm some human activities that might be sources of CO₂ emissions.
   • Brainstorm some natural sources of CO₂ emissions.

Graphs #3 and #4 – Temperature and Carbon Dioxide Variations

2. Since 1958, how have scientists measured current CO₂ levels and temperature of Earth? Describe this method.

3. How do scientists know what the CO₂ levels and temperature of Earth were hundreds of thousands of years ago? Describe this method.

4. Do you observe a correlation between CO₂ levels and global average temperature? Explain your evidence.
Station 1: Graphs #1 and #2
Global Temperature and Human Activities

Carbon Dioxide Variations

ATMOSPHERIC CO₂ LEVELS DURING THE PAST 1,000 YEARS

ATMOSPHERIC CO₂ LEVELS DURING THE PAST 400,000 YEARS

Commonwealth Scientific and Industrial Research Organisation (CSIRO) of Australia
http://ramblingsdc.net/Australia/Greenhouse.html
Station 1: Graphs #3 and #4

Global Temperature and Human Activities

Temperature and Carbon Dioxide Variations

TEMPERATURE AND CO₂ LEVELS, 1880-2006

TEMPEATURE AND CO₂ LEVELS DURING THE PAST 800,000 YEARS

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http://www.nap.edu/openbook.php?record_id=18730