Geologic Timeline Exploration Sheet

1. In the table below record the Average Global Temperature, Average Global CO₂ Concentration, and % Global Ice Cover for each time period listed.

Year	715 Ma	540 Ma	300 Ma	100 Ma	2 Ma	50 ka	10 ka	1880	2010
Average Global Temperature (°C)									
Average Global CO ₂ Concentration (ppm)									
% Global Ice Cover									

- 2. On the graph paper provided on Page 3, plot the Average Global Temperature and the Average Global CO₂ Concentration. The x-axis is the 9 distinct time periods for both graphs. The y-axis on the top graph depicts the Average Global Temperature in °C. The y-axis on the bottom graph depicts the Average Global CO₂ Concentration in parts per million (ppm).
- 3. What caused the increased temperature and higher CO₂ concentrations during the 100 Ma time period? Use the text in the **Exploration Image** to help you with your answer.
- 4. What contributes to the increased temperature and CO₂ concentration between 1880 and 2010? Use the text in the **Exploration Image** to help with your answer.

Analysis Questions. Answer in complete sentences.

5. What are the Average Global Temperature and Average Global CO₂ Concentration for the 2010 time period?

Average Global Temperature:

Average Global CO₂ Concentration:

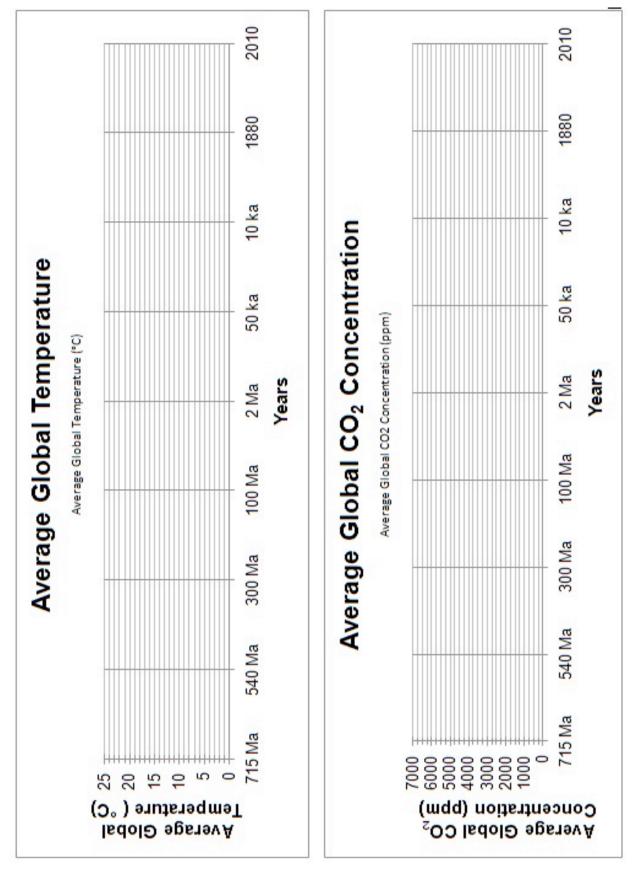
 Which time period has the highest Average Global Temperature and Average Global CO₂ Concentration? Which time periods has the lowest Average Global Temperature and Average Global CO₂

Highest:

Lowest:

7. What pattern do you observe between CO₂ and temperature? Support your claim with evidence.

8. Have humans always contributed to the global warming of our planet? Support your claim with evidence.



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