Geologic Timeline Exploration Sheet

1. In the table below record the Average Global Temperature, Average Global CO_2 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 CO_2 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 CO_2 Concentration in parts per million (ppm).

3. What caused the increased temperature and higher CO_2 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 CO_2 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 CO_2 Concentration for the 2010 time period?

Average Global Temperature:

Average Global CO_2 Concentration:

6. Which time period has the highest Average Global Temperature and Average Global CO_2 Concentration? Which time periods has the lowest Average Global Temperature and Average Global CO_2

   Highest:

   Lowest:

7. What pattern do you observe between CO_2 and temperature? Support your claim with evidence.

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