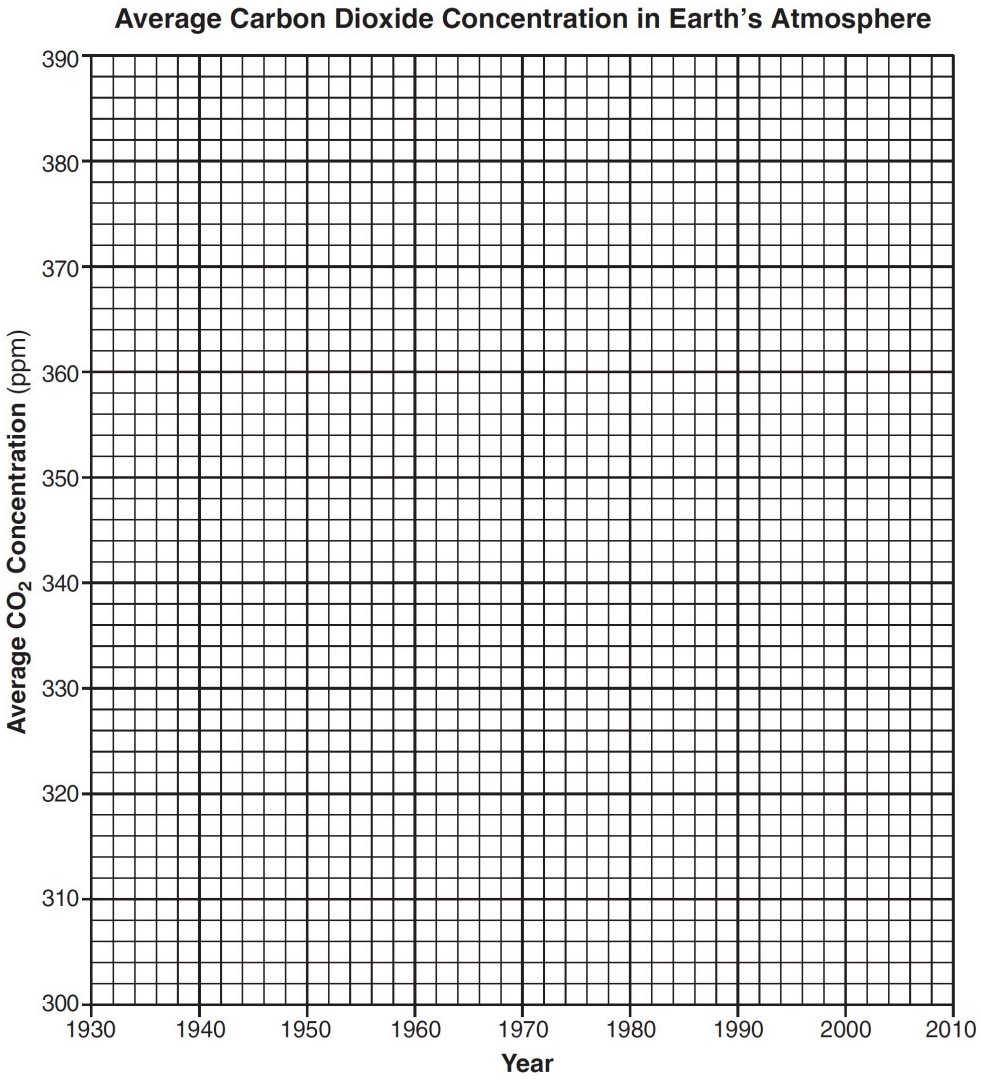
Name: _____ Period: _____

Carbon Dioxide Concentrations in Earth's atmosphere

On the grid below, construct a line graph by plotting the average carbon dioxide concentrations in Earth's atmosphere for each year shown on the data table. Connect the plots with a line.

Average Carbon Dioxide Concentrations in Earth's Atmosphere

Year	Average CO_2 Concentration (ppm)
1930	306
1940	308
1950	310
1960	316
1970	326
1980	338
1990	354
2000	370
2010	390



Base your answers to questions 1 through 3 on the data table from the previous page, which shows the average carbon dioxide (CO_2) concentrations in Earth's atmosphere for specific years from 1930 to 2010. Carbon dioxide is a greenhouse gas in Earth's atmosphere that contributes to global warming. The average carbon dioxide concentrations were measured in parts per million (ppm).

1. Calculate the rate of change from 1930 to 1940 of the average carbon dioxide concentrations, in parts per million per year.

2. Calculate the rate of change from 2000 to 2010 of the average carbon dioxide concentrations, in parts per million per year.

3. How does the rate of average carbon dioxide concentration change from 1930 to 1940 compare to the rate of change from 2000 to 2010? Propose one likely explanation for this difference.