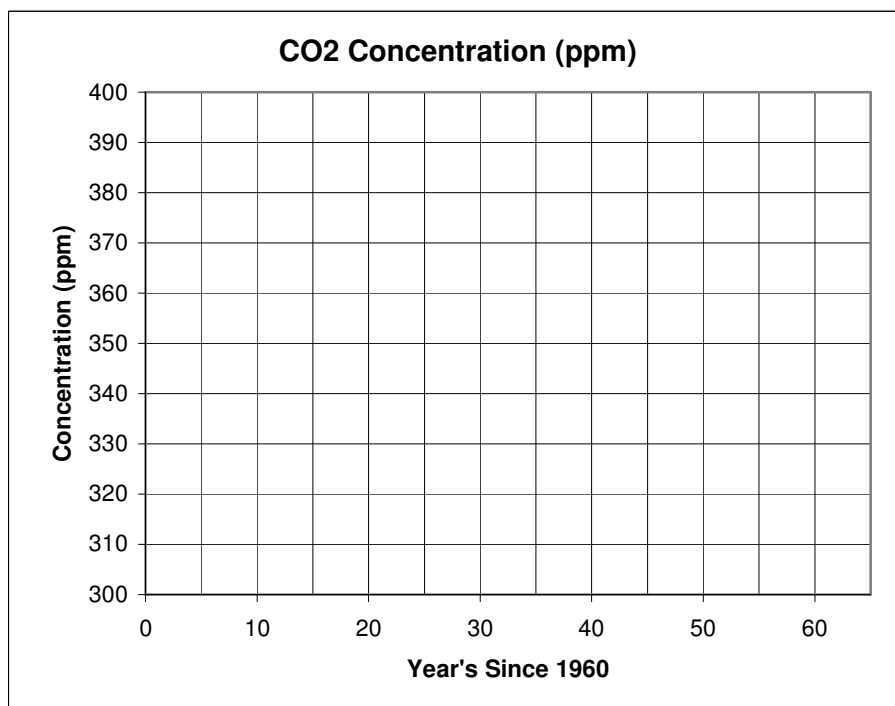


Carbon Dioxide Concentration in the Atmosphere

The table and graph below show the levels of CO₂ concentration, in parts per million, for several years in the past as measured at the Mauna Loa Observatory in Hawaii. Plot the data on the grid provided below, and then sketch a trend line on the grid provided below. Use the table and the graph you created to respond to the questions below.

Year	Years Since 1960	CO ₂ (ppm)	Year Change	(ppm) Change	Rate of Change	Model Prediction	Error
Y	t	C					
1965	5	320					
1970	10	325					
1980	20	339					
1988	28	351					



- How fast is the CO₂ level rising?
- When did the CO₂ level first reach 300 ppm?
- When will the CO₂ level reach 400 ppm?
- Predict the CO₂ level in 2005.
- Develop a linear functional model relating the CO₂ concentration to the number of years since 1960. How can your model be used to respond to the questions above?