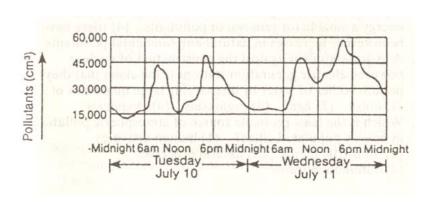
## Just Some More Review on RATE OF CHANGE

1. It is thought that in the last 100 years, the tectonic plates of the Earth have moved 100 centimeters. What is the rate of plate movement in centimeters/year?

2. The time it takes for the Earth to rotate (spin) a full 360° on its axis is 24 hours. What is the Earth's rate of rotation in degrees per hour?

Use the graph to the right to answer questions 3 and 4.



3. What is the approximate rate of increase in pollutants between noon and 6pm on Tuesday July 10?

4. During which time period was the relationship between time and pollutants relatively unaffected?

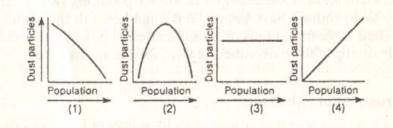
(1) Tuesday: 6am – noon

(2) Wednesday: noon -6pm

(3) Tuesday: 6pm - midnight

(4) Wednesday: midnight – 6am

5. Which graph represents a direct relationship between the population of an area and the number of dust particles?



- 6. It is a fact that the chemical weathering of marble occurs quicker in more humid (wetter) climates. Use the following information to sketch a graph to illustrate this relationship.
  - a. Label your axes time in years and amount weathered in grams.
  - b. Draw two lines: one representing a wet climate, and another representing a dry climate.
  - c. Give the graph a title.

7. A marble tombstone have been sitting in a particular cemetery for between the years 1850 and 2008. If over that time, the marble's mass has decreased by 25 grams, what was the rate of weathering of that marble?

8. Which graph shows a rate of decrease equal to 0.5°C/hr?

