

Topic: Measurement and Graphing

Aim:

Rate of Change = how fast something occurs (speed)

$$\text{Rate} = \frac{\text{change in value}}{\text{Time}}$$

$$\text{ROC} = \frac{\Delta V}{T}$$

The best way to learn about rate of change is to practice some problems

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?

3. A marble tombstone has been sitting in a particular cemetery for between the years 1850 and 2010. If over that time, the marble's mass has decreased by 25 grams, what was the rate at which the marble is breaking down?
Round your answer to the nearest tenths place.