

Grade(s): 5

Subject Area: Math

EALR/Standard:

5.4D- Graph ordered pairs in the coordinate plane

5.5C- Construct and interpret line graphs

Activity:

Construct a graph showing the growth of a plant over a week

*Created by Carrie Reinhart, Environmental studies intern for Whitman College, Spring 2010*

Goals:

Take measurements over time

Use a graph to represent and analyze change over time

Show that slope reflects quickness of change (growth)

Brief description:

Each group measures the height of one plant each day for a week and makes a graph of the data. The graphs of each team are then compared as a class to determine how fast each plant grew as compared to the rest of the class.

Materials:

1 plant per group

Rulers or measuring tapes

Graph paper

Flagging tape

Procedure:

Class is divided in groups. Each group selects a plant in the garden to measure and flags it with flagging tape. Height measurements are taken each day for a week.

Each group graphs on graphing paper the week's data. Then, each group's graph is compared as a class to determine which plants grew the fastest and which grew more slowly. Explain that the steepness of the slope represents how quickly the height of the plant changed over time.

New vocabulary:

Slope