Growth in the Garden

Grade Level: 3rd

Title of Lesson: Growth in the Garden

Performance Standard(s) Covered:
MCC3.MD.3 Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two- step scaled bar graph to represent a data set with several categories. Solve one- and two- step “how many more” and “how many less” problems using information presented in scaled bar graphs.

MCC3.MD.4 Generate measurement data by measuring lengths using rulers marked with measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters.

Essential Question: How do we display data in different forms? How do we measure length?

Objective: Students will be able to create a bar graph using measured length data to 90% accuracy.

Key Words and Terms:
- Data
- Measurement
- Bar graph
- Line plot

Learning Activity

Abstract:
Students will measure plants in the garden over a period of a few weeks and collect the data. They will then create line plots and bar graphs to represent their collected data.

Materials Needed:
- A garden
- Class set of rulers
- Class set of graphing paper

Safety Concerns:
Warn students of insects that bite and sting while in the garden.
**Procedure:**

1. Teach students how to use a ruler in the classroom.
2. Explain to them that you will be going to the garden every other day to measure the height growth of the new seedlings using the rulers.
3. Take the class out and assign each student a plant to measure so that they have consistent results.
4. Repeat until you have 8-10 days of data.
5. Once all data is gathered have students create a line plot and a bar graph of their data.
6. As a class create a bar graph of all data collected.