

Bean Race

Grade Level: 3rd

Title of Lesson: Bean race

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 plant and grow their own bean plant and track its measurements.

Materials Needed:

- Bean seeds (one per student)
- Cups (one per student)
- Soil (enough to fill each cup)
- Water source
- Ruler (class set)

Procedure:

1. Teach students how to plant a seed and what seeds need to grow.
2. Have each student plant their bean seed.
 - a. Have the students write their names on their cups.
 - b. Fill each cup with soil.
 - c. Plant the bean three times the width of the bean deep in the cup.
 - d. Place cups in a sunny place
 - e. Water plants daily to ensure proper growth.
3. Teach students how to use a ruler.
4. Explain to them that they will measure the growth of their bean plant for two weeks once it begins to sprout.
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 to determine who had the tallest bean plant.