ROOTS, STEM, LEAVES: LESSON 6
SPROUT THE PLANT PARTS

Teacher

SUBJECTS: Mathematics, Science	**SKILLS:** Measuring and Graphing

MATERIALS

- Discovery Kit Materials: Instruction sheet, Plastic tube, pea seeds, crystals, information card, paper cup, pipette, flowerpot, soil
- Discovery Journal pages 6-9

COMMON CORE STATE STANDARDS (CCSS)

MATHEMATICS

2.MD.1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks and measuring tapes.

2.MD.2 Measure the length of an object twice, using two different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.

2.MD.10 Organize, represent, and interpret data with up to four categories; complete picture graphs when single-unit scales are provided; complete bar graphs when single -unit scales are provided; solve simple put-together, take-apart, and compare problems in a graph.

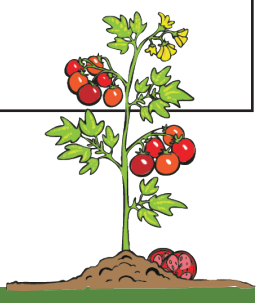
3.MD.3 Create scaled picture graphs to represent a data set with several categories. Create scaled bar graphs to represent a data set with several categories. Solve two-step “how many more” and “how many less” problems using information presented in the scaled graphs.

SCIENCE (OHIO LEARNING STANDARDS)

3.LS.3 Plants and animals have life cycles that are part of their adaptations for survival in their natural environments.

ESSENTIAL QUESTIONS

1. How do the different plant parts aid in its growth?
2. How do the specific characteristics of different plant parts help us distinguish them?
3. 3. How can a bar graph help me organize what I have learned?



I CAN STATEMENTS (LEARNING OBJECTIVES)

1. I can measure objects using the appropriate tools.
2. I can identify the functions of different plant parts.
3. I can answer questions about data in a bar graph.

LINKS

- ***Slug Science Journey Homepage*** https://www.miamicountyparks.com/node/1257
- ***Roots, Stems, Leaves Video*** https://vimeo.com/videobranch/review/415273115/2e49421561

ACTIVITY

The students will use the plastic tube to grow a bean seed. (See the Student Sheet on pages 6-7 of the Discovery Journal for detailed instructions. While seeds are growing, the student can measure growth each day with a ruler. Additionally, the student can comlete the Growth Chart Student Sheet to show how much the sprout grows each day. Finally, the students can complete the bar graph and answer the questions on the Bar Graph Student Sheet.

After 4 weeks the students can transplant the plant into the flowerpot (they can decorate the flowerpot with a marker) and keep it!

EVIDENCE OF ACTIVITY

Students will complete the Growth Chart Student Sheet and the Bar Graph Student Sheet on pages 8-9 of the Discovery Journal.