

Race to the Top!

Objective:

Students will compare and contrast the rates of growth of different varieties of beans.

You'll Need:

- Containers (half-gallon milk cartons or 2-liter bottles)
- Potting soil
- Bean seeds (a variety: lima, pinto, soybean, peas, bush beans, etc.)
- String
- Water
- Permanent markers
- Tape

Procedure:

Before you begin: Ask students to predict which variety of beans will germinate first and which will grow the tallest. Record predictions.

Then

1. Cut the milk cartons or 2-liter bottles to create 6-inch tall planters. (Be sure to use the same type of planter for each seed variety.)
2. Label the containers with the variety of seed to be planted and the date. Fill the containers with potting soil.
3. Plant bean seeds in the labeled containers and place under a plant light or on a well-lit windowsill.
4. Attach one end of a string to the counter beside each container and connect the other end of the string to a ceiling tile.
5. Keep the soil moistened but not overly soaked. Each planter should receive an identical amount of water.
6. Watch for signs of growth. Compare with your predictions.
7. Wrap young plants around the string as they grow. Measure growth and record data in plant journals.
8. Check your predictions and revise as needed.