



SUPER FAB LAB INVESTIGATION:

Growing Plants



Episode: My Shrinking Shoes

Cycle: Transformation & Change

Purpose (What We're Going to Explore and Learn)

- We're observing how plants change as they grow.
- We'll learn about the effects of growth by measuring and recording changes in the plants over days and weeks.
- We'll also learn something about taking care of plants.

Materials (The Stuff We Need)

- Seeds, beans usually work well.
- Potting soil
- Cups or other small containers to plant the seeds
- Plain wooden stick (a paint stirrer is perfect), a piece of sturdy cardboard, or a ruler to measure plants as they grow

Procedure (What to Do)

1. Put soil into the cups or containers.
2. Following the instructions on the seed packet, plant as many seeds as you like. (Plant at least a few in case some don't grow.) Add a little water.
3. Record what the cups look like when they were first planted. You can do this by taking a photograph, by drawing pictures, or by writing down children's observations of the cups. Don't forget to write down the date.
4. Put the cups in a sunny spot. (A sunny window should work if it isn't quite growing season in your area. Check the seed packet for information.)
5. WAIT. Growing takes time. Check the cups regularly—every day or every other day. Water the plants if the soil is dry.
6. One day you will see that the seeds have sprouted, and the plants are coming out of the soil. Be sure to record what the plants look like now. Write down the date. Talk with children about how many days you waited between planting the seed and seeing the new plant.
7. You might want to measure the plant. You can use a ruler or just use a plain piece of wood or cardboard. Place one end on the top of the soil and mark how tall the plant is. Write the date.
8. Measure and record your observations of the plant regularly—once a week is good. (You'll probably need to water the plants more often.)
9. Over a number of weeks you'll observe how the plant changes and grows. You'll also have records of the changes. Talk with children about how the plant has changed. Talk about how long it took. How many days has it been growing?
10. Transplant the seedlings into the garden or a larger pot so that they can continue to grow. With water, sun, and a little luck you'll observe more changes when flowers and beans grow.

Other Stuff You Might Want to Know or Do

- Preschoolers sometimes have trouble understanding time and how we measure it. This exploration is a good opportunity to talk with children about time, such as how many days come between planting and sprouting.
- We suggest using cardboard or a piece of wood so that you can write the dates of each measurement right on the measuring tool.
- If you choose to use a ruler, you can describe the plant as "almost four inches tall" or "between 3 and 4 inches tall." Don't worry too much about exact measurements.
- For more ways to explore measurement, check out the Super Fab Lab Investigation: Exploring Measurement.

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