AGRICULTURAL ENGINEERING

AGRICULTURAL ACTIVITY

Plant cycles

Materials

- small cups or jars
- potting soil
- seeds
- pen/pencil
- labels

Original source link: teachengineering.org

Instructions

1. Ask students to prepare a Growth Journal. The first entry should include the type of seed used and what they predict will happen to the seeds in the dark and in the light.
2. Give each student two cups or jars and ask them to label each container with their name. One cup will be given light the other will be placed in the dark.
3. Fill each cup with potting soil.
4. Dig a small hole in the soil of each cup and place a seed in both pots. Cover the seed over with soil.
5. Add a little water to the soil.
6. Place one cup in a sunny area, like on a windowsill and the other in a dark, shady area.
7. Ask the students to predict how the different lighting will affect the seeds growth and which plant will end up growing the most over the course of the activity.
8. Leave the plants in their respective locations for about a week, watering the plants when needed and making observations every day on the progress of each plant.
9. Each week ask each student to complete an entry in their Growth Journal reflecting on their predictions and comparing them to the actual outcomes of the plant growth.
10. Ask the students to research photosynthesis and write in their journal the reason why the plant in the light might have grown more than the plant in the dark.
11. Move all the plants into the same location where the sun shines, then leave them for another couple days.
12. After a few days, observe the new changes in the plants and revisit the concept of photosynthesis. Was light important for the seedling's growth? Why or why not?

ACTIVITY