Name: _____ Date: _____

# How Seeds Grow in Different Soils

Lesson adapted from 2003 ohiocorn.org Kid's Corner web page

## Explanation

You can compare how plants grow in different kinds of soil. Then you'll be able to decide what's best for your plants. For this experiment you will grow three plants, all the same, under all the same conditions -- except one. Only the soil will be different.

## Materials and Equipment

- a small trowel or large spoon
- labels
- three 4-inch (10 cm) plant pots, cans, or empty milk cartons (all must be the same)
- seeds (choose either sweet corn or field corn seeds)
- water
- measuring cup
- three white cards or pieces of paper
- scissors
- pencil and notebook
- three kinds of soil: potting soil, garden soil (example: from a yard), sand

## Procedure

1. Sterilize any soils you didn't buy from a store. Bake them in the oven for 20 minutes at 350 degrees F.
2. Use your trowel or large spoon and fill each of the three pots with the same amount of soil. Put a different kind of soil in each container. Be sure each container has holes in the bottom for drainage. Label each pot with the kind of soil it contains.
3. Now plant three seeds in each pot. Plant each seed about 3/4 inch deep.
4. Measure out 1/3 cup (80 ml) of water to pour into each pot. Make sure each plant has exactly the same amount of water.
5. Put the pots together in the same place. Cover each with a white card or piece of paper.
6. Every third day, water your plants. Use exactly 1/3 cup (80 ml) of water for each.
7. When the seeds begin to poke out of the soil, remove the covers.
8. When the plants grow their first set of leaves, snip off plants so that each pot has only two.

## Observation

In the space below or in a notebook, note how the plants are different after a week:

a. The date on which each plant sprouted.
b. The number of seeds that sprouted in each type of soil.
c. The size of each plant.
d. The color of each plant.
e. The number and condition of the leaves.
f. The strength of the stems (stalks).

Look again after 2, 3 and 4 weeks. Now you are ready to draw conclusions.

1. Which soils are the best for growing corn plants?

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