

# How Does Your Garden Grow?

**Overview:** *Students will plant a small garden of birdseed on a sponge.*

## Materials

- untreated birdseed
- untreated sponges (one per group)
- aluminum pie pan (one per group)
- Birdseed Growth Data Sheet
- magnifier for each student
- water
- hot-glue gun

## Lesson Preparation

- Label the pie pans with a number which is assigned to each group of students. Hot-glue one sponge to each pie pan to keep it in place. Add enough water to soak the sponge and leave a thin covering of water on the bottom of the pan.

## Activity

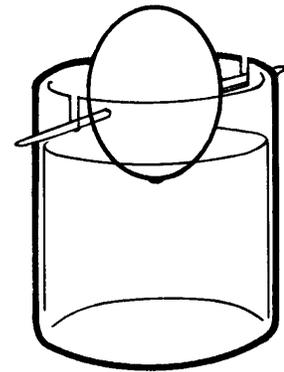
1. Have students get into their groups. Distribute a magnifier to each student and a sample of birdseed. Let them examine the birdseed and describe what they see. Tell them that these seeds are too small to open up to see if each has a baby plant inside it. Ask them to think of a way to find out if there is a baby plant inside. Tell them that one way is to plant them in a small garden where they can be observed.
2. Provide each group with a pie pan, sponge, and about a tablespoon of birdseed. Let the students sprinkle their birdseed over the top of the sponge. Tell them they have just planted a small garden. Explain that these will be collected and placed on a table but will be returned to each group daily during the time they measure their lima bean and pinto bean plants. Explain that they will keep a daily record of changes they see in their gardens.
3. Distribute a copy of page 16 to each student to begin the recording of the sponge garden.

## Closure

- Record the growth of the seeds.
- Discuss what the students have learned thus far.

## Extender

- Soak an avocado seed to soften it and split it open so the students can see the small seedling inside.
- Grow an avocado seed for students to observe. It takes several months for the seedling to appear. Use a one-pint (.5 L) water bottle cut to half its height. Push two toothpicks or T-pins into opposite sides of the seed about halfway between the ends. Cut two slits on opposite sides of the bottle and put the toothpicks in the slits. The seed should be suspended so the stem end is below water level. Replace the water as it evaporates.





# How Does Your Garden Grow? *(cont.)*

## *Birdseed Growth Data Sheet*

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**To the Student:** You have just planted a small garden of birdseed on a sponge. Since you are doing an experiment to see if there is anything inside the seeds, it is important to make a record of what happens during the next few days. Begin your record on the chart below.

### **Birdseed Growth Record**

| <b>Date</b> | <b>Tell what the seeds look like today.</b> | <b>Draw some of the seeds.</b> |
|-------------|---|--------------------------------|
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