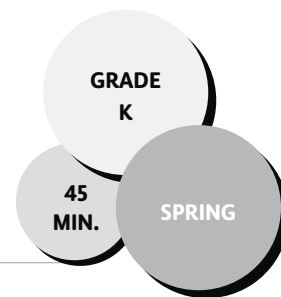


# Sunflower House

**THEME:** GROWING AND ACCESSING NOURISHING FOOD



## ESSENTIAL QUESTION

*What do flowers need to grow?*

## LEARNING OBJECTIVE

✓ Students will be able to sow sunflower seeds.

### CONCEPTS

sow sprout seed seedling

### ENGAGING THE CLASSROOM TEACHER

- Prior to the lesson, coordinate with the teacher about your strategy for caring for the seedlings, whether the class will do it independently or with you in subsequent weeks. See the After Class Action Step below.
- During Action Step 4, suggest that the teacher support students in sharing materials, sowing their seeds, and writing their names on their cups.

## LESSON DESCRIPTION

In this lesson, students engage in a medley of sensory activities as an introduction to the garden, including making a sound map, doing a blind tasting of garden fruits and vegetables, and creating collections of objects with opposite attributes from inside the garden. This lesson can be taught in conjunction with Sunny Honey Seed Snacks.

## MATERIALS

- Newspaper or vinyl tablecloths (optional)
- *Sunflower House* by Eve Bunting
- 1 packet of sunflower seeds to plant
- 1 sample cup for each student
- 12-quart bag of organic seed starting mix, in a tub for easy cleanup
- 2-3 cups of shelled, unsalted sunflower seeds to eat
- Permanent marker
- Trays for carrying cups
- Spray bottle
- Observation Log (p. 107, optional)
- Plant Care Schedule (p. 108)

## PREPARATION

- › Identify an outdoor planting space, if possible. If not, prepare an indoor planting space. You may want to put newspaper or vinyl tablecloths down to minimize the mess.
- › Coordinate with the classroom teacher to create a schedule for students to water and care for their seedlings.
- › Pre-irrigate your seed starting mix by adding water until it is about as damp as a wrung-out sponge.
- › Poke 3-4 drainage holes in the bottom of each sample cup.
- › Prepare trays with the following for groups of 4-6 students:
  - › Sample cups
  - › Sunflower seeds

- › A container of organic seed starting mix
- › 2 spoons or other small scoops to use in the seed starting mix

## ACTION STEPS

**1. Tasting:** Gather students and explain that because it's spring it's a great time to plant flowers. Give students clues about what flower you're talking about without naming it. Say, *The flower seed that we're going to plant today grows big and tall, even bigger than me. The head of the flower moves to face the sun during the day. Birds love to eat the seeds, and so do I! Can you guess what it is?* Pass around edible, shelled sunflower seeds for students to try. If you have a document camera, consider breaking open one of the unshelled planting seeds to help make the connection. You may want to explain how we use sunflower seeds to make many other foods like sunflower oil and sunflower seed butter. **(5 min.)**

**2. Reading:** Read *Sunflower House*. As you're reading, stop and ask questions to check for understanding. For example, say, *It says, "I Sow my sunflower seeds." I wonder what the word "sow" means. Can we guess based on the picture?* Have students turn to a partner to think-pair-share. Because the book consists of rhyming couplets, give students a chance to anticipate the predictable second rhymes by pausing and allowing them to chorally guess the word. After reading, invite students to act out certain events from the book with their bodies, such as planting seeds. **(10 min.)**

**3. Model:** Explain to students that just like the child in the story, they're going to sow sunflower seeds today. Show them how to

plant their seeds. Fill your sample cup with seed starting mix, and tell students that you'll make a hole as deep as your first knuckle. Have students point to their first knuckle as you point to yours. Place two seeds in the hole, and ask students, *Now what should I do? Remind me, what do seeds need to grow?* Cover your seeds, and spritz your soil with as many sprays needed to saturate the soil, and tell students that they should only spray their soil that amount of times. **(5 min.)**

**4. Sowing Seeds:** Give groups of 4–6 students a tray with the materials, and remind them to share, taking and planting just two seeds. While they're working, walk around the room, and write each student's name on their cup. Have students clean up their spots. **(15 min.)**

**5. Sharing:** Gather in a circle, and ask students to share where they plan to plant their sunflower seedling or to whom they plan to give the plant. If you plan to later transplant seedlings in the garden together as a class, discuss when their seedlings will be ready to be transplanted outside. Depending on your region, this might include explaining when the last frost is. Consider looking at the calendar together and counting the days until they'll be ready. **(5 min.)**

**(After Class):** Determine how you will care for the sunflower seeds as they germinate and grow. Ask the classroom teacher ahead of time if they can grow in a windowsill in the classroom, with students rotating the job of watering them every day with a spray bottle to keep the soil moist (but not soggy). Or you might put them all in a tray and grow them in another location such as a school greenhouse, if you have one, and then

bring them back to students when they're ready to transplant. Because you planted two seeds in each cup, many will grow two plants. In those cups, once plants are about four inches tall, cut off the smaller of the two to let the other one grow. They'll need to be transplanted soon after, either as a second session with the class or by sending them home with students.

## REFLECTION

Have students discuss the following questions in small groups, then share with the class: *(5 min.)*

### Social and emotional learning

- *What was your favorite part about sowing our sunflower seeds?*
- *What part was hard? How could we practice or learn to solve that problem?*

### Check for understanding

- *How will we take care of our sunflower seeds over the next couple of weeks?*
- *When do you think we'll see them sprout?*

## ADAPTATIONS

**Observation Extension:** Have each student set up a log where they'll record observations with pictures of the progress of the plants' growth.

**Mindful Movement Extension:** After the reading, provide students an opportunity to move their bodies by having them pretend to be sunflowers. Prompt them to take deep breaths, taking in the air they need to grow. Then pretend you're the sun, or hold a sun prop and move it around the circle, encouraging students to stretch their bodies in the sun's direction and move their faces to face the sun.

**Garden Setting Variation:** You can lead this activity outside where students are sowing seeds in a circle directly into the ground to create a sunflower house. Mark off the area and prepare the soil, then bring students out to either direct sow or transplant their sunflower seedlings. Grow them over the summer, and harvest and enjoy the seeds together in the fall! Even if you don't have an established garden, talk to your school grounds/maintenance staff to determine whether there is a location for your sunflower house.

## ACADEMIC CONNECTIONS

English Language Arts Common Core State Standards

### CCSS.ELA-LITERACY.RL.K.1

With prompting and support, ask and answer questions about key details in a text.

Next Generation Science Standards, Life Science Disciplinary Core Idea

### NGSS K.LS1.C.

Organization for Matter and Energy Flow in Organisms – All animals need food in order to live and grow. They obtain their food from plants or from other animals. Plants need water and light to live and grow.

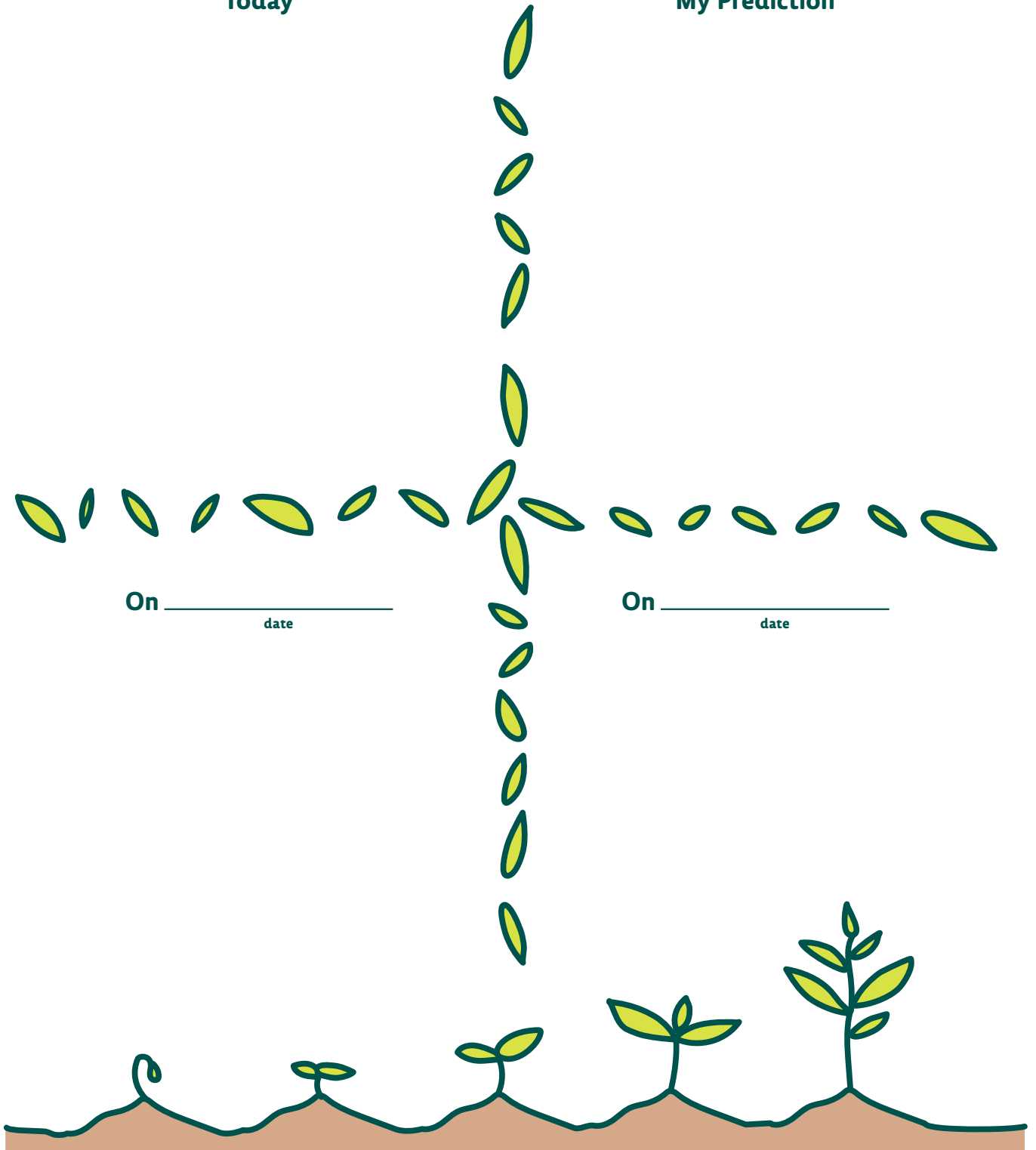
# Observation Log

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

Project: \_\_\_\_\_

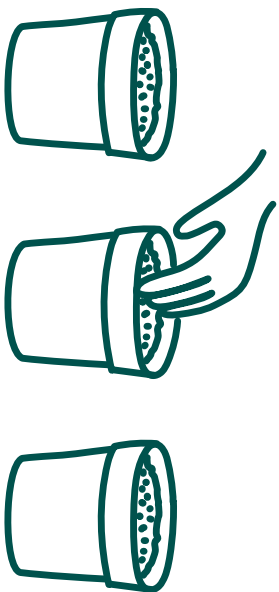
Today

My Prediction



# PLANT CARE SCHEDULE

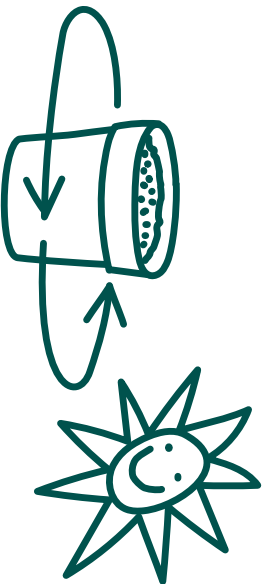
STEP 1: Feel the soil



STEP 2: Spray plants with water



STEP 3: Rotate plants / check they have enough light



| Day | Your Name |
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