



Starter Plants

Lesson Description

In this lesson, students will learn how to plant seeds in starter trays using seed packet information. Students have the opportunity to plant seeds for the school garden.

- Time required: 60 minutes
- Location of lesson: Classroom and garden



Learning Objectives

- Learn how to plant seeds using seed packet information.
- Learn why it is important to plant starter plants.
- Prepare starter plants in trays.


Materials and Preparation

- Seed packets (1 per student or pair)
- Popsicle sticks
- Markers
- Shovels
- Watering cans
- Starter trays (find these at any greenhouse store, or online)
- Composted soil
- Prepared vegetable snack of the week – 1 for each student
- Water to drink during the Class Warm-up – water dispenser in the classroom and 1 cup or a water bottle for each student

Class Warm-up: Champion Cheer and Veggie Taste Test (5-10 minutes)

- Give each student a cup of water or ensure that they have a filled water bottle in front of them.
- Give each student the prepared veggie snack of the day.
- Lead the students in enthusiastically reciting the  **Champion Cheer**.
- At the end of the cheer, drink water and eat the veggie snack together.
- Have students complete their  **Taste Test Observations** about the vegetable snack of the week.

Review of Last Lesson (2-3 minutes)

- Review the evaluation questions from last week's lesson. Evaluation questions from all lessons are listed at the end of the  workbook.

Class Discussion (5-10 minutes)

Today we will be working outside in the garden. Raise your hand if you are excited to go outside and work in the garden. Before we go, let’s see what you already know about planting.

- Have you ever planted anything before?
- What types of vegetables have you planted?
- When do you usually plant seeds in the outdoor garden? (Spring)
- When do you usually plant seeds in the greenhouse? (Fall)

We are going to prepare starter trays. You will take care of your starter plants and watch them grow. Once they are big enough, they can be planted outside.

- Do any of you know what a starter plant looks like? (Answer: a starter plant is a plant that is only about 2 inches tall)

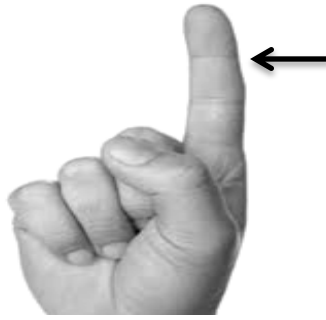
We plant seeds in little containers first so they get the right nourishment. It is similar to caring for a baby. We want to take good care of the plant when it’s small, so it can grow to be strong and nourished.

Activities (40-45 minutes)

- **“Reading Seed Packets” (15 minutes):** Students will learn how to use seed packet information to plant seeds.
 1. I am going to pass out seed packets. Once you have your seed packet, please flip it over and read the back of it quietly.
 - a. You may give each student their own seed packet or have students do this in pairs.
 - b. While the students are reading quietly, draw a chart on the board with the following information: how deep to plant the seed, how far apart the seeds should be planted, days to germinate, and days to harvest. It can look something like this:

How deep to plant seed	How far apart the seeds should be planted	Days to germinate	Days to harvest

2. Ask one student volunteer (or pair) to come to the front of the class and read what the back of the seed packet says.
3. As a class, go over each item with the students.
 - a. When you talk about how deep to plant the seed, a helpful rule of thumb is to place the seed on the soil and poke it down to your first knuckle on your finger (shown below).



- b. *It will take months before we can start harvesting vegetables from the garden. Seeds need time to grow! Who knows what germinate means? (when a seed begins to sprout)*
 - 4. Ask students with different seed packets to come up in front of the class and share the information about their seeds.
- **“Starter Plant Trays” (25-30 minutes):** The students will learn how to prepare starter trays.
 - 1. Inside: Demonstrate how to prepare starter trays, divide students into groups, and review safety rules of the garden.
 - a. *Before we go outside, I will demonstrate how to prepare starter trays and we will review the safety rules of the garden.*
 - i. Demonstrate in front of the class: *Each group will get a starter tray and fill it with composted soil. Place seed(s) on the top of the soil and use your finger to poke the seed(s) into the soil. Remember, use your first knuckle to measure how deep to poke into the soil. Cover the hole with soil, but do not pack the soil down. Then, we water the trays and label the tray with a popsicle stick that has our names and the type of seeds we planted.*
 - ii. *Remember, when we work in the garden I have certain expectations of your behavior. I expect you all to be respectful of self, respectful of one another, and respectful of the garden.*
 - iii. Using the type of seeds they have from the previous activity, divide students into groups of 2 or 3 (depending on the size of the class and how many plants your garden will hold) and give a starter tray to each group.
 - 1. Try to keep the same seeds in one tray. This helps to not get confused as to what is growing where.
 - 2. Outside: Have the students prepare the starter trays.
 - a. Make sure students take turns planting the seeds and watering their trays.
 - 3. Remind students:
 - a. *It is your responsibility to take care of your tray. In order for your plants to grow, the trays need to stay moist and get plenty of sunlight. Keep a close eye on them as they begin to sprout. Once your starter plants have reached about 2 inches tall, it is time to transplant them into the outdoor garden!*

Evaluation Questions (5 minutes)

1. *What does germinate mean?* (Answer: when a seed is beginning to sprout)
2. *Why can't we harvest vegetables right after we plant the seed?* (Answer: they need time to grow)
3. *What time of year do we usually plant the outdoor garden?* (Answer: Spring)
4. *What time of year do we usually plant in the greenhouse?* (Answer: Fall)
5. *What is a simple tool we can use to measure how deep to plant a seed?* (Answer: our pointer finger – poke a seed down in the soil as deep as the first knuckle)
6. *Why is it important to start seeds out in starter trays?* (Answer: so they can get enough nutrients and be strong enough before planting them in the ground)
7. *Why can't we harvest vegetables right after we plan the seed?* (Answer: they need time to grow)
8. *How much water should you drink every day?* (Answer: at least 6 cups of water a day)
9. *How many fruits and vegetables should you eat every day?* (Answer: at least 5 fruits and vegetables a day)
10. *Does gardening connect you to your culture and help you learn new words in your language?* (Answer: yes)

Preparation for Future Lessons – Reminder for the Instructor

- Review the materials and preparation needed for the next lesson.

Notes
