



Description

We will introduce basic gardening techniques and explore plant parts with the help of a garden goodie: carrots. In this lesson, we will share a story, play the “Carrot Talking Stick” game, taste carrot parts, and learn about planting seeds.

Highlighted Objectives

PHYSICAL

- *Demonstrates traveling skills*
- *Demonstrates balancing skills*

LITERACY

- *Comprehends and responds to books and other texts*
- *Demonstrates knowledge of print and its uses*

SCIENCE & TECHNOLOGY

- *Uses tools and other technology to perform tasks*

SOCIAL STUDIES

- *Shows basic understanding of people and how they live*
- *Explores change related to familiar people or places*

Vocabulary

carrot: a root vegetable, often orange in color

root: a part of the plant that grows beneath the soil, providing nourishment to the plant

furrow: a narrow trench for planting

sprinkle: a delicately scatter

germinate: to begin growing and sprouting

leaves: the flattened structure of a plant that attaches to the stalk

stem: the main body or stalk of the plant

Materials & Preparation

- carrot from the garden
- *The Carrot Seed* by Crockett Johnson
- extra carrots for tasting (if there are not enough in the garden)
- watering cans
- garden tools
- seeds

Methods

1. Read *The Carrot Seed* by Crockett Johnson. Just before the carrot emerges near the end of the story, ask students what they think will happen next.
2. If you have mature carrots in the garden, harvest one! Examine the whole carrot. What do you notice about it?
3. Play the “Carrot Talking Stick” game. Explain: “We only speak when we are holding the carrot stick.” Ask each student in the circle to share an observation of something they notice about the carrot as they pass it around the circle, and record answers on the observation station board. This is an excellent time to explore concepts of plant parts, as students may notice things like the tiny hairlike roots and how the greens resemble a “tree.”
4. Which part of the carrot do we usually eat? After a few answers, share that we most often eat the root, though the leaves are also edible and can be used as an herb in soups or salads. Break off a few leaves and offer some to each student to taste. Then pass out a carrot “root” to each child and play the Tasting Game. Have students respond to this statement after each has a taste, “My carrot root was....”
5. Next, gather in the garden to begin planting seeds. Model the method of making a furrow with the tool. Then, sprinkle the seeds with plenty of space between them; pat the soil to cover, and gently sprinkle water (like the little boy in *The Carrot Seed*). Have students take turns with the tools, seeds, and water so that everyone has a chance to plant.
6. When students are finished planting, make a plan for the following week. How will we know if our carrots are growing? What will we do if the seeds do not germinate? What did the little boy in the story do to his seeds, even after everyone said they would not come up? Make a plan to sprinkle water on the garden next week and to keep checking until the seeds germinate.



Growing Notes

Carrots are cold-season plants that take a long time to mature. They can be sown directly in the school garden in the fall (around late August) and again in the spring (around March). They do not transplant well, so plant them where they will grow, and then thin them to 2-3 inches apart when the seedlings emerge. Carrots can take as long as three weeks to germinate, so keep the soil moist until sprouts appear. Cover them with row cover fabric or mulch lightly with straw in winter to extend the harvest. Carrots become sweeter in the winter as they convert starches to sugars to prevent freezing. They can stay in the ground in the winter until they are ready to harvest.



Deepening Activities



Cooking: Make a salad of the carrot parts or cut carrots and add them plus the tops to the soup.



Math and Science: Make a chart tracking the carrots' growth. Check the carrots daily, observing how long it takes for carrots to germinate. Then measure the growth of the greens. As carrot growth progresses, discuss how we know when carrots are ready to harvest.



Literacy Connections: Draw and label the carrot in journals. Check carrots through the season. Continue to update the journal with noted changes and pictures.

