

Small Group: Plant Onion Bulbs

STEM Key Concepts: Plants start in different ways; Some plants start from seeds; Some plants start from bulbs; Plants grow in many places; Plants need water, food, sunlight and space to grow; Plants grow in places where they get their needs met; Plants often grow in some type of soil. **ELA Focus Skills:** Compare and Contrast, Speaking and Listening, Vocabulary



Safety Tips:

- Remind children to wash their hands before and after the activity.
- Remind children not to eat any plants or touch any plants without asking an adult.

Hold up an onion bulb and show children the top (pointer end) and bottom (flat end) of the bulb. Then tell children that today they are going to plant onion bulbs in the pots so they can watch what happens as they grow. Remind children that it can take a number of days before a plant sprouts.

- Guide children as they fill the containers with dirt and plant 2–3 onion bulbs in each one. Be sure they plant the bulb with the top of the bulb above the soil. Ask children, Why do you think you need to plant the bulb with the top of the bulb above the soil? (The onion stems will grow rapidly in the first week.)
- Ask children to draw or write to record what the bulb looks like on the first day.

Then tell children they are going to “plant” another onion in water. Ask children,

- Why do you think we are planting the bulbs in water this time? If children don’t grasp the concept, explain that they won’t be able to see the roots growing in the soil, but they will be able to watch the onion roots grow in the water.
- Demonstrate how to poke toothpicks into the side of an onion. Then have children balance the onion bulb across the top of a jar.
- Direct children to fill the cup with water so that it just touches the tiny roots at the base of the onion.
- Record the bulb’s progress on a chart. Take photographs to record the exploration.

Tell children they will check the bulbs each day to see if there are any changes. Discuss any changes and have children record the changes.

Math Tip: As plants grow, have children count the number of stems growing out of each onion bulb. Put a growth chart next to each onion. Record the day, and write or draw the number of stems.

Math Tip: As children check the plants’ growth, have them measure and record the length of the stems on each bulb. You may want to have them make a graph comparing the lengths on different days.

Adaptation: For groups with very young children, you may want to poke the onion with the toothpick for them or guide them with your hand over theirs.