

Dig a Little Deeper

Concepts

- A plant's roots absorb water and minerals from the soil.
- Roots hold the plant in the ground.
- Lateral roots extend from the main root.
- Root growth occurs at the tip of each root where fine root hairs absorb food from the soil.

Materials

hand trowel
magnifying glasses
pencil and paper or garden journal
various plants from the garden
Eyewitness: Plant (see appendix 1)

Description

- 1 Take children to the garden, and help them dig up a few plants to study. Herbs work well for this activity since they grow abundantly in most gardens. Try digging up a basil plant, a sage plant, and some parsley or mint. For comparison purposes, you could also choose to dig up a radish, a carrot, a potato, some lettuce, and any nearby weeds.
- 2 Gather a small group of children to study the various plants using magnifying glasses. Engage the children in a discussion of similarities and differences. Call attention to the roots of each plant.
- 3 Open *Eyewitness: Plant* to page 8. Have the children examine the plants again to see if they can distinguish between the three types of roots discussed in the book. Continue looking at the roots in the book through page 10 to see if you find other similarities.
- 4 Take pictures of these plants and their roots for your documentation. Have children choose one plant to draw, and encourage them to draw the plant as it looks both above and below the ground.

Extensions

- Give children rulers, and let them measure the roots of various plants.
- Prepare and cook a vegetable that grows as a root, such as carrots, radishes, or beets.
- Use toothpicks to suspend a clove of garlic, a piece of sweet potato or potato, or an avocado pit in a glass of water with the top sticking out. Watch and take notes as the plant develops roots. Then plant it in a pot of soil until it can later be transplanted into your garden.

