

Garden Caretakers - Weeding



Students will participate in garden maintenance by pulling weeds and examining the different root structures.



INDOOR/OUTDOOR

GRADES

SEASON

TIME

OUTDOOR

ANY

ANY

20 MIN +

Garden Site Preparation

Prior to starting your activity walk around the garden scouting out areas in need of weeding. Pull out a couple of weed examples from the garden to later show students. You may consider pre-irrigating the area(s) to be weeded a few days before to make the weeds easier to pull.

Materials

- Gloves
- Trowels
- Laminated Pictures of Root Types
- Buckets or Empty Large Plant Containers
- Shovels
- Rope, Hose, Flags to Mark Areas

Engage

Ask students to turn to a neighbor and define what a weed is. Call on some teams to share the definitions they come up with.

Today we are going to be caretakers of our garden to help it grow and look beautiful by removing weeds. Can anyone define what a weed is? A weed is a plant that is growing where we do not want it to be growing. **What might be some reasons we don't want weeds in our garden?** Weeds take the space, food and water of the plants we want in our garden.

Now we are going to be performing a simple skit that shows why we don't want weeds in our garden because they can take over the resources of other plants. Ask for a volunteer to play the happy plant in the garden and then ask for a couple more volunteers to play our weeds. Have the students playing the weeds to put their hands over the happy plant shading and crowding it out, which makes the happy plants unhappy because without sun and space the happy plant isn't able to grow big and strong. Weeds also compete for water resources with other plants so have the weeds pretend to suck the water from the roots of the happy plant (have "weed" students make sucking noises). There are other reasons why weeds are problems for plants and people. You may consider demonstrating other reasons we remove weeds such as: binding or strangling plants or being irritants or sharp.

Explore

If possible, consider having small groups of students work together. Send groups to areas in the garden to find what they believe are weeds. Or walk with the whole group asking kids to identify what they believe are weeds. Have students pair share or tell you why they think the plants are weeds.

Explain

1. Walk around the garden with the students pointing out areas in which they will be working and pointing out some of the weeds they will want to pull out. You may want to define areas you plan to weed with rope or garden hose or use landscape flags or ribbons to mark the plants you don't want weeded.
2. Demonstrate how best to pull different types of weeds. Some weeds might be a little more difficult to pull out and a trowel or even a digging fork might be needed, in this case demonstrate to the students how to properly use a trowel and/or fork. Simply dig a little under the weed and pull up and the weed and roots should come out, you might have to pull out the remain roots by hand. Show students how to knock off extra root soil in the garden
3. Show the laminated pictures of the most common root structures that the students will see on the weeds they pull out.
4. Provide students with buckets/containers to place the weeds in.

Elaborate

After collecting weeds for a while have students refer to the root type cards and sort their weeds. Depending on your group(s) size you may do this in small groups or bring everyone back together as a big group. Have students sort the weeds into groups, line-up, or big circle. For example making groups of similar root structures, lining up the weeds from shortest to longest root, or grouping them up by similar plant size.

Ask the students if there is anything interesting that they notice about their weeds. Pick a couple of students to explain to the class what interesting things they noticed. If you notice any interesting weeds point them out to the rest of the class.

Plant root structures are very different so this is a good time to have students compare the different type of root structures and to ask the students why they think the root structures vary per plant. Students will most likely find the two most common root structures which are taproots and fibrous roots.

- Taproot: a large main root that grows straight down and gives off many smaller side roots.
- Fibrous: a root (as in most grasses) that is one of many similar slender roots branching directly from the base of the stem of a plant.

Evaluate and Closure

Have the students collect all the weeds and place them into the compost bin. If your group collected noxious, creeping grasses, or weeds that have already set seeds you may not want to compost them but rather put them in a green bin or landfill trash.

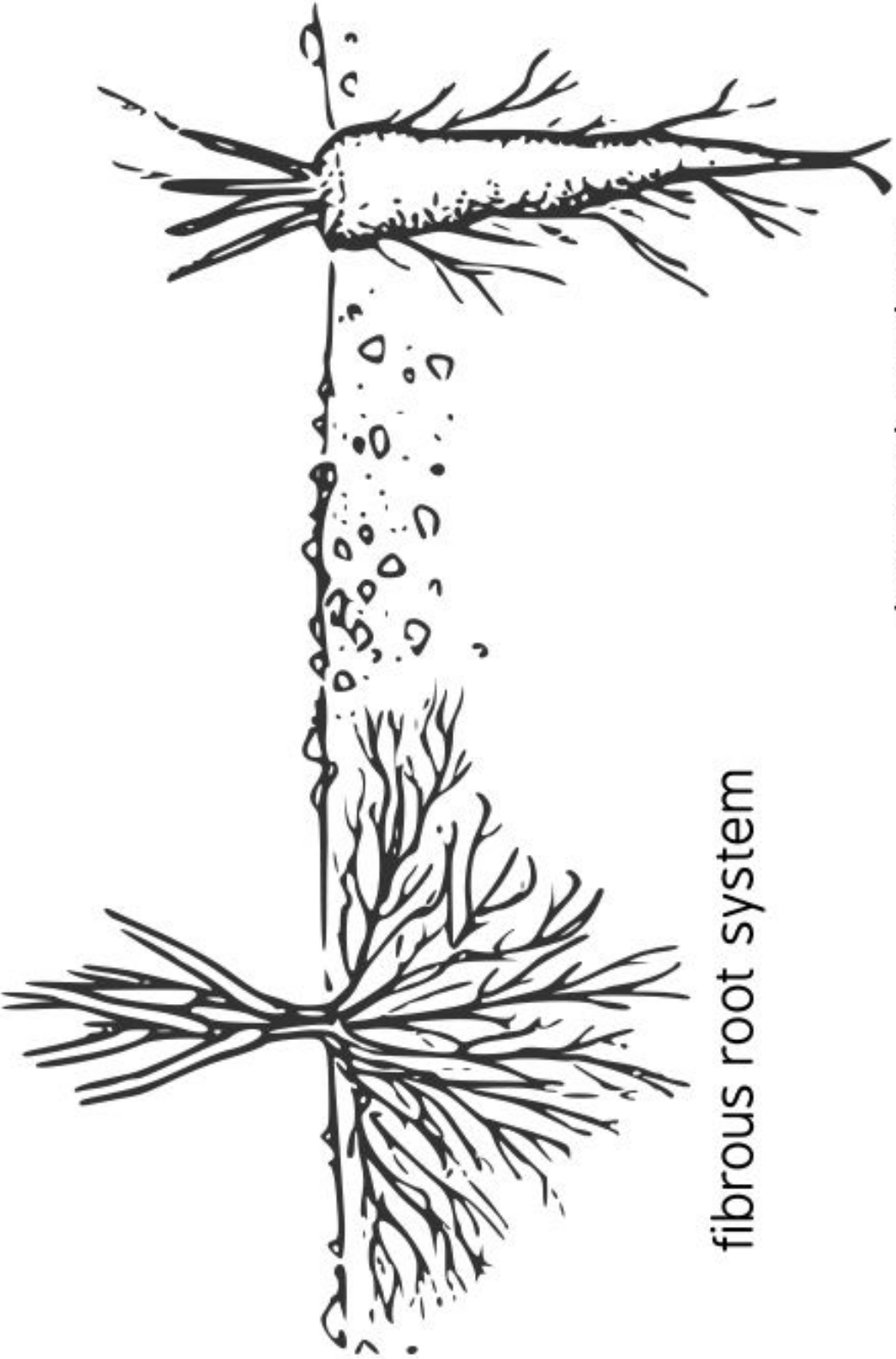
Circle up for a quick debrief of the activity and have students pair share on questions like these:

What would happen to the garden if we didn't weed?

Why are weeds bad for our garden?

How does it feel to be a garden caretaker?

End the day with recognizing the caretaking work by having students pat themselves on their back or by thanking another student for being a caretaker.



fibrous root system

tap root system

TYPES OF ROOT SYSTEMS

