

* adapted from Molly Reid's Exploring Garden Ecosystems lesson on the TeachingChannel.com

Grade Levels

Grade 3-4

Curriculum Objectives

Grade 3

Science and Technology: Understanding Life Systems Specific Expectations

- 2.3 Germinate seeds and record similarities and differences as seedlings develop
- 3.2 Identify the major parts of plants, including root, stem, flower, stamen, pistil, leaf, seed, and fruit, and describe how each contributes to the plant's survival within the plant's environment
- 3.3 Describe the changes that different plants undergo in their life cycles

Grade 4

Science and Technology: Understanding Life Systems *Overall Expectations*

- Investigate the interdependence of plants and animals within specific habitats and communities
- Demonstrate an understanding of habitats and communities and the relationships among the plants and animals that live in them

Materials:

- Seeds and seedlings to be transplanted
- Spades
- Watering Cans
- Plant part role cards
- Garden Bug Tally sheets
- Clipboards and pencils

Activity

Divide the class into three equal groups and rotate through the following stations after explaining the overall activity. Allow 15 minutes for each station. (Stations 1 and 3 function best with a facilitator).

Station 1: Plant parts

As a group, students will match the roles provided to the corresponding part of the plant using clothespins to attach the roles to the corresponding parts. Encourage discussion and consensus.

Why do we think this role matches this plant part or another?

After roles have been matched with plant parts, ask students to find examples of each part in the garden, sketch/diagram the part, and label it in their journals.

- Which plants are in flower?
- Which plants have large stems?
- What do the different leaves look like?

Station 2: Who lives in our garden?

Distribute clipboards and worksheets to each student and invite them to explore the garden area in search of bugs that inhabit the garden. Discuss how we have changed the environment and have as a consequence attracted different creatures to this space that perhaps otherwise would not be here. Ask the students to draw quick sketches of the insects they find, count the total number of each type of insect and finally take notes including whether they think the creature plays a detrimental or beneficial role in the garden.

Station 3: Transplanting

Students will transplant their seedlings into the garden; they can do this in pairs if the number of seedlings outweighs the number of spaces for transplanting in the garden. Ask the students to refer to their garden map from the planning workshop to identify where each transplant will go, and where new seeds need to be sown directly, and to decide who will plant what where.

Once the seedlings are planted, students record their observations on their plant observation sheets, continuing from previous seed starting workshop.