

Focus on: Thinning Plants

This lesson is meant to support the unit on Plants on Earth. For this lesson, students will learn two different methods for thinning plants and will then use those methods to thin plants in the garden from the seeds they planted.

Clarifying Objectives:

3.L.2.1 Remember the function of the following plant structures as it relates to the survival of plants in their environment:

- Roots –absorb nutrients
- Stems –provide support
- Leaves – synthesize food
- Flowers – attract pollinators and produce seed for reproduction

3.L.2.2 Explain how environmental conditions determine how well plants survive and grow.

3.L.2.3 Summarize the distinct stages of the life cycle of seed plants.

Key Vocabulary:

Definitions can be found at <http://learnersdictionary.com>

-Function
-Plant Structures
-Survive/ Survival
-Environment /Environmental
-Conditions
-Roots
-Absorb
-Nutrients
-Stems
-Support
-Leaves
-Synthesize
-Flowers
-Pollinators
-Produce
-Reproduction
-Summarize
-Stages
-Life Cycle
-Seed Plants

Focus Question(s):

What are the benefits for each method of thinning plants?

Materials:

School Garden
Garden Gloves to wear while working in the garden
Garden plants that have already sprouted

Activities:

1. Watch this video on thinning seedlings:
https://www.youtube.com/watch?v=IzJztDcs_AI
2. Discuss the two methods for thinning plants
3. Compare and contrast the 2 methods (hand pulling and cutting with scissors) Discuss the benefits or risks for each method.
4. Permit children to select the method they prefer.
5. Visit the garden to thin plants they previously planted in the garden.
6. Be sure students select the weakest plants to thin. Also make sure plants are spaced the required amount for optimum growth.

Guiding Questions:

- Why is it necessary to thin plants?
- What are the two methods for thinning plants?
- What are the benefits for pulling seedlings out by hand? (You can transplant the extra plant.)
- What are the risks of pulling seedlings out by hand? (You may pull out both plants or damage the roots.)
- What are the benefits of using scissors to thin plants? (No seedlings are accidentally uprooted and no roots are damaged.)
- What is the down side to using scissors to thin plants? (You can't transplant if the plant is cut off.)
- Which plant should be removed? How did you decide?
- What might happen if the plants are left to grow in the garden too close together? (The plants would compete for resources – water, nutrients from the soil, and even sun.)
- How is having too many seedlings in one area similar to having weeds growing near a plant?