

Lesson Eight:

SEEDS OF LEARNING

This lesson provides students with the opportunity to recall the material they have learned through the EcoTeam program, and consider the opportunity for responsibility this knowledge gives them.

PART I: LESSON OVERVIEW

A. Learning Objectives

Upon completion of this lesson students will be able to:

1. Recall facts they learned in previous EcoTeam lessons.
2. Describe the main themes in *The Lorax* and how they pertain to EcoTeam.
3. Apply understanding and commitment to the EcoTeam lessons by planting and nurturing wildflower seeds.
4. Commit to implement six environmental citizen actions from Lesson 7's class brainstorming.

B. Correlation to State and National Standards and Guidelines

See chart

C. Textbook Compatibility

See chart

D. Materials

1 copy of *The Lorax* by Dr. Seuss
Potting soil
3 in. plant pots (cleaned re-used milk boxes work well- one per student)
1 spray bottle
Native wildflower or other plant seeds
EcoTeam trivia questions
Black or White board and marker (or large sheet of paper if playing outside)
EcoTeam Completion Certificates (pdf)

E. Advance Preparation

You will need to locate a supplier of native wildflower seeds. It is advised to do this early-on since annual seed supplies can become scarce. You can re-use the children's milk boxes as plant pots. Let the teacher know a week in advance, so that the milk boxes can be cleaned and saved. It is recommended that you locate and bring in pictures of the flowers the kids will plant to inspire their caring for the seed. It is also suggested that you read *The Lorax* several times in advance to review/learn the story. This lesson can easily be taught outside if you wish. If the lesson is indoors, cover the children's table or desk with old newspaper to keep it from getting dirty.

F. Key Vocabulary

Comittment
Native wildflower

G. References

PART II: LEARNING CYCLE APPLICATION

Phase One: Exploration (E)

1. Introduce the lesson. Explain that the lesson has three parts; a trivia game, story time, EcoTeam certificates, and wildflower planting.
2. Divide the class into two equal teams. Allow each team to brainstorm a name. Make a score chart (on the board) with each team name on it.
3. Have each team make a line.
4. Explain: *First, I will ask team A a question. If you are in the front of the team A line, you will have a moment to talk with your teammates before you answer the question. If you are right, your team gets one point, but if you don't know the answer, or are wrong, the question will go to team B. If the person in the front of the team B line- after talking the question over with his or her team- answers this question correctly, they will get a point. Then I will ask team B a question, and back and forth.*
*Note: All odd number questions should be directed at team A first, and even questions go to team B. The last question can be used as a bonus question for a tie-breaker. Also, if one team is scoring a lot of the points, you can narrow the gap by introducing 'special questions' that are worth more points.
5. Play the game.
6. The team with the most points wins, but it is very important at the end of the game to add all the points together, to calculate the class score. (You can choose to keep track of an "all-class high score" as a challenge for future classes.) As you announce the class score, stress that the large amount of knowledge held by the class as a whole is awesome.
7. Allow the class to get settled after the excitement of the trivia game. Choose a location of the classroom that is best for reading where the students can sit in a circle and listen and look at the pictures.
8. Read the story, allow the class to look at the pictures and ask questions.
9. When the story is finished, lead a debrief discussion asking questions to guide the children's discussion along the themes of the book:
 - What was the point of the story?
 - Where did all the Truffula trees go?
 - Why did they cut down all the Truffula trees?
 - Do you think people really need thneeds?
 - What happened to the Barbaloots, Swammee-Swams and Humming-Fish? Why?
 - Do you have any ideas what the Lorax meant when he wrote UNLESS?
 - What do you think the seed symbolizes? Symbolizes means standing for something else. Do you think the seed stands for something?
 - What is the little boy's role in the story?
 - Do you think the boy has any responsibility to take care of the seed? Why or why not?

*Note: Have planting stations set up before reading *The Lorax*. If there is more than one teacher present, one can set up the station while the other reads *The Lorax*.

10. Explain to the group that it is time for each of them to plant a seed which they will care for. Review what a plant needs in order to grow: water, sunlight, CO₂/air, water, (space). Explain that the seeds to be planted are native wildflower seeds. Ask the students if they know what native means. Explain that native means that the plants have grown naturally in the region for a long time.

11. Explain that a plant needs soil to get nutrients and as a place where the roots can grow. Tell the students that the soil has lots of nutrients in it. If you the soil was taken from a local garden, or has compost mixed in, let the students know. Facilitator will give directions for planting seeds

12. Have three stations set up in a line, so the students can easily walk through them.

Potting: Put the bucket of potting soil by the stack of pots. When the student gets to this station, they will fill their pot halfway full with soil, and make a hole in the center about 1/8 to 1/16 inches deep (half the length from the tip of your pinky to the knuckle.)

Seed planting: Put the container of local seeds on a table. Allow each student to take a pinch of seeds, put it in their soil hole and pack it in with soil.

Watering & labeling: Set up the spray bottle next to the seeds. Allow students to come through and spray their planted seed enough to get the soil layer wet. Explain the significance of this action and how each student needs to continue watering until the seed germinates (sprouts).

The plant is also going to need a lot of light, so it is important that each student put their plant on a window sill or in a section of their own homes that gets a lot of sunlight. As the plant grows bigger, it will need to be switched to a bigger pot to give the roots more room to grow.

13. Clean-up flower planting stations

14. Hand out the EcoTeam Certificates. Instruct children to look back at the brainstorming list they generated during Lesson 7 and identify the six actions they starred. Instruct the students to copy those six action commitments- or others if they change their mind- onto their EcoTeam certificate ONLY IF they are prepared to commit to following through.

15. Say good-bye and thank the class and the teacher for the opportunity to teach to and learn with them.

Part III. BACKGROUND INFORMATION FOR FACILITATOR

A. General

The Lorax is an allegory about the environmental degradation that is a result of American lifestyle. “The Onceler” is representative of capitalistic interests as he cuts down the Truffula trees in an unsustainable manner. Consumers support this degradation by purchasing the “thneeds,” the Truffula product. As a result, the animals in the story (Swammee-Swans, Humming-Fish, and Brown Barbaloots) lose their habitat and are forced to leave. Throughout the story, the Lorax advocates for the trees and animals, but to little avail. The story ends inspiring hope and responsibility in the reader to take action and make positive change.

*Note- In response to the environmental conservation/preservation bias of *The Lorax*, The American Hardwood Foundation published a pro-commercial forestry story titled, *The Truax*. You can obtain copies of the *Truax* by contacting the foundation directly.

Native species are plants that naturally grow in a given region, i.e. were not introduced as ornamentals from another area. For extensive information about native wildflowers visit The Ladybird Johnson Wildflower Center at **www.wildflower.org**