The Old Maple Tree

CLASS ACTIVITIES

Fluent Reading | 2nd Grade

LITERACY MINDSET

What is the plant life cycle?

Use this essential question to guide student learning with class discussion and inquiry activities.

1. REVIEW THE PLANT LIFE CYCLE (45 MINUTES)

Log in to **teacher.waterford.org**, and then access the **Plant Life Cycle and Growth** activity. Complete the activity as a class. Then have each student individually complete **The Plant Life Cycle** worksheet.

2. SUMMARIZE THE STORY (30 MINUTES)

Discuss with students how in the book *The Old Maple Tree*, we learn about the plant cycle of a maple tree. Remind them that throughout the book, each tree lives in a different place, but they all grow from another maple tree seed that has been carried to a new place by a human. Emphasize that this is part of the plant life cycle—seeds are often carried to a new place by elements (such as the wind or water) or by animals (including humans).

Have students summarize the sprouting of each tree using the **Story Board 1** graphic organizer. For this activity, students should list, in order, where each tree grew and draw a picture to represent that part of the story.

> ***Support:*** Provide students with sentence starters to use:

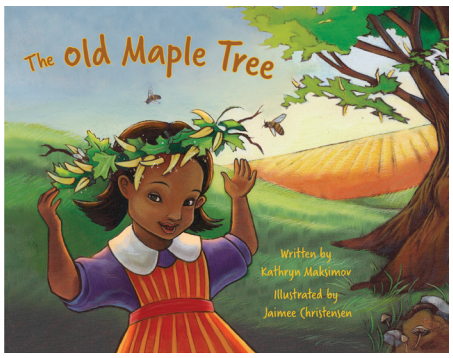
1. The first tree grew _____. [Answer: on a farm]
2. The second tree grew _____. [Answer: on a prairie]
3. The third tree grew _____. [Answer: in a city]

3. PLANT A TREE (60 MINUTES)

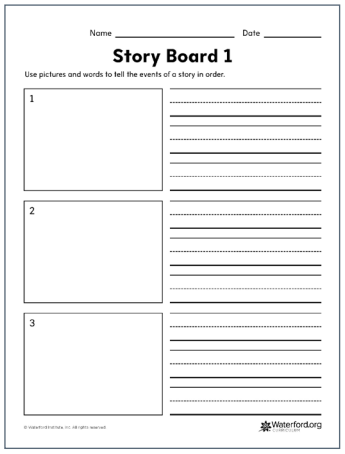
Tell students that planting a tree is one of the best things you can do for the environment. Explain that trees help clean the air, cool surrounding areas, save water, and provide shelter for animals, among other things.

Work with a knowledgeable adult, such as a member of the school's grounds staff, a parent, or a local arborist, to plant a new tree on the school's campus. Be sure to consult with the school and/or district administration ahead of time to ensure regulations are met.

After the tree has been planted, have students write a paragraph reflecting on how the experience made them feel. Be sure to continue caring for the tree (with guidance from the school's ground staff) after it has been planted.



*Use the bilingual book **El viejo árbol de maple** to help support Spanish ELL students with these activities.*


Name _____ Date _____

Story Board 1

Use pictures and words to tell the events of a story in order.

1

2

3

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Story Board 1

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4. LEARN ABOUT SEED DISPERSAL (2 HOURS)

Explain to students that there are five ways in which the seeds of a plant can be dispersed (spread to a new location):

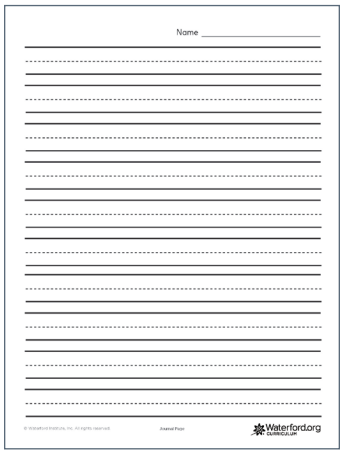
1. Animals
2. Explosion
3. Gravity
4. Water
5. Wind

Tell students that they are going to learn more about each of these seed dispersal methods. Share with them an educational video, website, or printed resource that describes each of the five methods for seed dispersal. Inform students that they should pay close attention to the presented information, as they will be asked to share what they learned afterward. They can take notes on a sheet of paper or using this **Journal Page** graphic organizer.

After students have digested the information, engage in a whole-class discussion about what was learned, focusing on putting into kid-friendly language the different ways seeds are dispersed. Record details on a large sheet of butcher paper, a projected word processing document, etc.

ELL SUPPORT

While reading the book, pause regularly to ask comprehension check questions via circling. Review the details of the story using questions that are not open-ended.



Journal Page

6. DESIGN AND TEST A MODEL (2 HOURS)

As students learned in the previous activity, one way seeds are dispersed is by sticking to the fur of animals. For this activity, students will be working in groups or 4–5 to create a model of animal and to show how this animal can disperse seeds.

1. Begin by supplying students with a variety of materials that can be used to create their model animal. The purpose is to create an animal with legs (to "walk") and fur that can disperse seeds. Students should be allowed creative freedom in designing their animals, and these animals do not all have to be the same shape/size or made from the same materials.

Here is a list of materials to consider supplying:

- Cotton balls
- Modeling dough
- Styrofoam balls
- Toilet paper rolls
- Toothpicks
- Pipe cleaners
- Velcro
- Rubber bands
- Glue
- Tape
- Scissors
- Googly eyes

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2. Before groups create their animals, have them first sketch out a design on a sheet of paper or on this **Journal** sheet. Students should also write down the materials they'll be using and the purpose for each material (for example, "toothpicks: legs"). Remind them that the purpose of the experiment is to build an animal that has fur that seeds can get attached to.
3. After groups design their animals, have them construct these animals using the provided materials.
4. Scatter a large portion of small seeds in a box top or on a large sheet of butcher paper laid out on the floor. (These could be bird seeds or any other type of seed small enough to stick to the students' designed animals.) Have each group walk their animal through the seeds. Remind students that animals can also sit, lay down, and roll on the ground, and have them replicate these actions to help seeds stick to their animal.
5. After the animals have been walked, rolled, etc. through the seeds, instruct students to walk them across a clean surface (such as another box top or large sheet of butcher paper). Animals can also sit, lay, and roll. Ask students to pay attention to what happens. Do any of the seeds fall off? Why or why not? If seeds do fall off, how many fall off and how many remain stuck to the animal?
6. At the end of the activity, have each student individually write a paragraph about what they observed and what they learned.

7. DISCUSS SCIENTIFIC OBSERVATIONS (20 MINUTES)

After finishing the previous activity, bring the students back together and have a whole-class discussion about the experiment. Ask the following questions:

1. Did your model animal get seeds stuck to it? Why or why not?
2. Did the seeds later fall off? Why or why not?
3. What types of animals in nature would most likely carry seeds? Why?
4. What characteristics of seeds would make them likely to stick to an animal's fur?
5. What did you learn from this experiment?
6. Do you have any questions about how animals disperse seeds through attachment?

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