The Life of Douglas-fir

Grade Level: K-2

Essential Skills: 2, 4, 5, 9

CCSS: K.RL.1, K.RL.3, K.RL.10, K.SL.2, K.SL.6, 1.RL., 1.SL.2, 2.RL.2, 2.SL.2

NGSS: K-LS1-1

Time: 50 minutes

Materials:
Life of Douglas-fir Kit* or:
Per Student
- 3"x3" *Life Cycle card**
- 3.5" x 3.5" paper gift card box or jewelry box*
- Pinecone sticker*
- Seedling sticker*
- Young tree sticker*
- Finished tree sticker*
- Green paint*
- 3" wooden Christmas tree*
- Glue*
- Paintbrush

*Included in the kit from Oregon Agriculture in the Classroom

AITC Library Resources:
Books:
Christmas Tree Farm
The Tree Farmer
The Life Cycle of a Tree

More Lessons:
Discover Christmas Trees
The Gift of Trees

Description:
Students will explore the life cycle of a Douglas-fir Christmas tree through this fun craft learning the various stages of growth.

Activity Directions:
Part 1: The Story of Christmas Trees
1. Read the book *Christmas Farm* by Mary Lyn Ray.

2. After reading the book, ask students the following questions:
   a. What caused some of the trees to be "lost"?
   b. What kind of care did the trees need throughout the year?
   c. What age were the trees when Wilma sold them to customers?

3. Tell students they will be learning about how Christmas trees grow in Oregon.

Part 2: Introduction to an Oregon Christmas Tree Farm
1. Explain to students that they will be watching a short video to learn more about how trees are grown on a farm in Oregon.

2. Watch *Christmas Tree, How Does it Grow?* by True Food TV: https://youtu.be/lcmVOcCWbQg

3. After the video, ask students the following questions:
   a. What tools did the Christmas tree growers use to harvest and care for the trees?
   b. How do Christmas tree growers care for the trees?
   c. What happens to the Christmas trees after they are cut at the Noble Mountain Tree Farm?

Part 3: The Life of Douglas-fir Activity
Provide students with a set of materials: a life cycle card, pinecone sticker, seedling sticker, young tree sticker, a finished tree sticker and a 3.5"x3.5" paper jewelry box.

1. Tell students that they will be using the materials to create a Christmas tree life cycle diagram.

2. Explain the following stages of the Christmas tree life cycle to students as they add the corresponding life stage sticker to the *Life Cycle* card.

Christmas trees are planted yearly so there are always trees ready for harvest at different sizes. Seeds from a **pinecone** are gathered in various locations throughout the state and purchased for use in growing trees. (Have students add the pinecone sticker to their life cycle card.)

Pinecone

The trees are anywhere from 1-3 years old when they are planted in a field. They are grown in a nursery or greenhouse before that. The **seedlings** are planted in rows in the ground during the spring. Christmas trees are planted by hand or by machine. (Have students add the seedling sticker to their life cycle card.)

Seedling

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The trees are mostly left alone during the first couple years of growth. Trees at age 3-6 are called a **young tree.** Each year, starting at about 3, crews go through the trees with machetes or clippers and shear the tree. This means they are trimming the branches to help the tree be the cone shape we are used to. (Have students add the young tree sticker to their life cycle card.)

Young Tree

Christmas trees are considered a **finished tree** at 6-10 years old when they are harvested. (Have students add the finished tree sticker to their life cycle card.)

Finished Tree

3. After students have completed their life cycle card, have them glue it inside the paper jewelry box on the bottom piece.

4. Then, provide students with a wooden Christmas tree, green paint and a paintbrush. Have students glue the wooden Christmas tree to the top of the lid of the jewelry box.

5. Instruct students to paint the tree to represent a Douglas-fir Christmas tree like they saw in the video.

Life Cycle of a Douglas-fir

Pinecone

Seedling

Young Tree

Finished Tree