

TEACHER'S GUIDE

Ideas for incorporating *CHRISTMAS TREE FARM* by Ann Purmell
(Holiday House, 2006) into your classroom.

ENVIRONMENTAL SCIENCE

With growing concerns about global warming, *Christmas Tree Farm* gives an ideal opportunity to talk about the importance of caring for oxygen-producing trees.

- Discuss tree harvesting/deforestation/reforestation and how tree farming contribute to those.
- Discuss the natural enemies of trees such as disease, insects and animals such as deer and rabbits. How do tree farmers protect trees? How can they do it in an organic/green way that is effective and safe?
- How trees can be recycled? (Refer to Christmas Tree Facts in the back of the book)
- How can Christmas trees be used as a wildlife feeder all winter long?
- Discuss and bring in examples of Scotch pine, Blue spruce, Douglas fir. (Hint: Many other example are given on the last two pages of the book)
- Take a nature walk to look for pine—Ask: What animals make their homes in pine trees? Why? Pine trees have sap, why? Why do pine trees make cones? What is their purpose? Do animals eat them? If so, which ones? (Squirrels, for example, eat the seeds off of the cones.) Why are pines called "evergreen" trees? What makes that possible
- What do trees, like pines, do for humans? Some possible answers: Provide oxygen, create shade, prevent soil erosion, beautify the landscape, make homes for birds and small animals, some provide food, create a wind break, and they can be fun to climb. Of course, a harvested pine tree gives us a special symbol for Christmas, and can become a bird feeder as well. Trees can also be harvested for lumber to build homes and furniture, and for making paper products. Can you think of any other things trees do for you?
- Plant a tree together as a class. (Hint: White pines grow quickly. Contact the National Arbor Day Foundation for details on receiving trees for each child in your class.)

LANGUAGE ARTS

Ask students to bring in a photo of themselves with a Christmas tree or any favorite tree (a backyard tree with a tire swing, a tree they planted themselves, a tree they like to climb or just think is beautiful or unusual). Use this as a writing prompt for a journal entry or for a short story. "When I think of my favorite tree, I remember . . ." or "A Christmas tree is my favorite because . . ."

Write a poem about a Christmas tree from the point of view of the tree—the day it is planted, the day it reaches its full height, the day it is cut down, the day it is sold, the day it is decorated, the day it is taken down, the day the animals visit, etc. If the tree could speak, what would it say?

Write a non-fiction essay explaining step-by-step how to select, set up and decorate a Christmas tree. Contrast that with preparations for another holiday such as Hanukkah or Kwanza.

Write an acrostic poem about a favorite tree.

Imagine you and your family stranded on a deserted island at Christmas. There are only 30 foot palm trees. How could you decorate it? What would you use? How would you do things differently from the way you usually celebrate? Do you think it would be more fun or less fun?

HISTORY

Discuss the history and traditions surrounding the Christmas tree. (Refer to the Christmas Tree Time Line in the back of the book) How do traditions differ around the world? How are they similar?

Why is the state tree of Michigan and Maine? How was it chosen? When? What other trees were considered? What tree would you nominate? What other states have a pine/spruce/fir tree as their state tree? (Hint: There are more than a dozen total, including Alabama, Colorado and Minnesota!)

MATH

Create story problems based on the book . . . for example:

(1) If a tree grows six inches in one year, how many years does it take for a tree to grow to be 36 inches tall? 48 inches tall? 60 inches?

(2) Grandpa tags his trees according to height.

Blue tags mean five feet tall. It sells for \$45.

Red tags mean six feet tall. It sells for \$55.

Yellow means seven feet tall. It sells for \$65.

If the Lopez family bought a tree with a yellow tag, and the Brown family bought a tree with an blue tag, and the Chung family bought a tree with a red tag, how much money did Grandpa make from selling the three trees?

(3) Grandpa plants new seedlings in rows that are about six feet apart. If he wanted to plant 10 rows of trees, about how much space would he need all together? _____ feet.

(4) For every tree that Grandpa cuts down, he plants three saplings to replace it. If Grandpa cuts down 155 trees this Christmas, how many saplings will he need to plant to replace them?

According to the National Arbor Day Foundation, over a period of 50 years, a tree generates \$31,350 worth of oxygen, \$62,000 worth of air pollution control, recycles \$37,500 worth of water, and prevents \$31,500 worth of soil erosion. What is the total value of a tree?

ART

Create a wreath using pine boughs—fill the classroom with the scent of pine.

Make strings of popcorn and cranberries to hang in a tree for birds to enjoy.

Cover pinecones in peanut butter or suet and roll in birdseed to hang in a tree.

Paint pinecones white, roll in clear or silver glitter, and add a silver cord to create a wintry decoration.

Health and Safety

In *Christmas Tree Farm* Grandpa uses tools such as a chain saw and a hand saw. The children help him shape in the trees in summertime using pruners and trimmers. This would be an opportunity to ask someone from a local nursery or greenhouse to come in and explain the importance of safety goggles, wearing heavy gloves, only using tools with adult supervision and permission. Show them how to use gardening tools that are safe for them to use—trowel, rake, shovel, etc. This person could also show students how to plant and water a tree properly.

Discuss Christmas tree safety, just as Grandpa does in the book, regarding properly watering a tree to prevent it from drying out, about proper placement of a tree out of direct sunlight and never placing it near a heat source such as a fireplace or candles, shaking off dead needles, only using lights intended for trees, do not burn candles on a tree, etc.