



The Book Planter

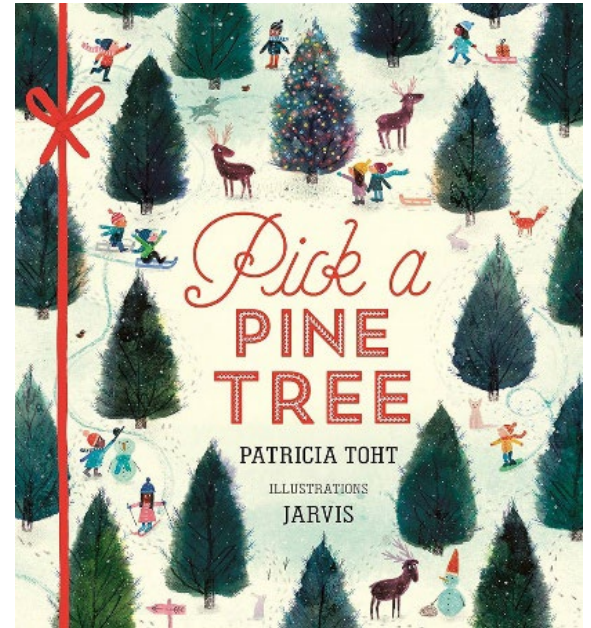


Ag in the Classroom

Post Office Box 27766 | Raleigh, NC 27611 | (919) 782-1705
ncagintheclassroom.com

December 2023
Pick a Pine Tree
Written by: Patricia Toht
Illustrated by: Jarvis

Part of the magic of the Christmas season stems from the traditions that families and friends take part in every year: hanging stockings, putting lights in the windows; and, one of the most important of all, picking out and taking home the Christmas tree. *Pick a Pine* evokes all the rituals of decorating the tree—digging out boxes jam-packed with ornaments and tree trimmings, stringing tinsel, and, at long last, turning on those twinkling lights.



Note to readers: You may think the trees on the cover of *Pick a Pine* look like Fraser firs. Here in North Carolina, we grow the Fraser fir—the most common tree used at Christmastime in North Carolina—but what is the difference between these evergreens (pines and firs)? This activity sheet will explore that and so much more!

Before Reading¹

1. Ask the class, “What is a tradition? (a long-standing belief or practice that continues from one generation to another) Explain that holidays usually have associated traditions. Ask, “What holiday has the tradition of cookouts and fireworks? How about wearing costumes and trick-or-treating? What are some Thanksgiving traditions?” Explain that many cultural and religious groups celebrate holidays. Brainstorm and share traditions of some of these. If there are students whose families do not celebrate American holidays, allow them to share the traditions celebrated in their homes.
2. Show students the cover of *Pick a Pine Tree* and read the title. Ask, “Based on the title and cover art, which holiday and tradition do you think this book is about?” Ask for specific details that helped students make that inference.
3. Point out and discuss the difference between the author and illustrator. Show students the Jacket flap and read about the author and illustrator. Ask, “What Christmas tree traditions are mentioned by the author and illustrator?” Explain that the book describes one family’s Christmas tree traditions.

During Reading¹

1. Explain that the text is presented in a how-to structure, like instructions, or a recipe with steps in time order. (For older students, you might introduce the term chronological or sequential.)
2. Read the story aloud, emphasizing the rhyme and rhythm of the text.
3. Before each page turn, encourage the students to predict what comes next in the process of setting up and decorating the Christmas tree.

After Reading¹

1. Ask students to recall as many specific details as they can. Use prompting as necessary.
 - a. Where does the family get a Christmas tree?
 - b. How do they get the tree home?
 - c. What things do they do before decorating the tree? During? After?
2. Ask questions that require students to make connections to the text. (examples below)
 - a. If your family has a Christmas tree, where do you get it and how do you get it home?
 - b. Have you decorated or helped someone else decorate a Christmas tree? What was similar in the story to your experience? What was different?
 - c. If your family decorates for any holiday, how do you go about it? Are there specific decorations you use year after year? Do any of these have special meaning?
 - d. If you haven't decorated a tree, what about carving a pumpkin or decorating for Halloween? Is it more fun with friends? Why or why not?

Activity 1: Pines, Spruces, Firs and More²

Materials Needed

- Picture of a fir or spruce tree
- Clippings from a pine, spruce, and fir tree—enough for students to work in pairs to identify them
 - If you cannot obtain these clippings from local trees, ask a local florist if they have any. Many Christmas floral arrangements include evergreens.
 - Note, you will not need a tree key for this activity, but if you would like to have one for your own reference, then a very good, simple one is *Tree Finder: A Manual for the Identification of Trees by their Leaves*, by May Theilgaard Watts.

Procedures

1. Show your students a picture of a fir or spruce tree, and ask them what it is. Chances are, they'll call it a pine tree. You'd be amazed how many children's books do the same! There are dozens of species of evergreen trees both native and introduced, and only a handful of those are actually pines. Welcome to the world of conifers—fir, spruce, juniper, cedar, cypress, larch, pine, and more!
2. Introduce your students to a simple, handy, alliterative phrase they can use to differentiate among conifer types. "Pine needles come in packets. Spruce needles are square. Fir needles

are flat and friendly.” Or an even quicker way to remember it: “Pines come in packets, spruces are square, firs are flat and friendly.” This phrase relates to the shared characteristics of trees in each of these three main groupings of conifers. Pines share the characteristic that their needles grow in packets or bundles, called “fascicles.” Spruce needles are square in cross-section, so when you roll one in your fingers, you’ll notice the bump-bump-bump of the squared sides. Fir needles are flat, and when you grab a fir branch, it’s soft to the touch, not prickly like pines and spruces. This phrase over-simplifies the real-life story of diversity in the forest, since, for instance, there are conifer species like Eastern hemlock that have flat needles but aren’t firs, but it’s a great starting point.

3. Have students sit together in pairs, and give each pair a clipping of pine, spruce, and fir. Talk through the process of noticing the needle packets on the pine twig, the square needles on the spruce twig, and the flat, soft (not prickly) needles of the fir.
4. You may only have time and resources for the in-class portion of this activity, but if you can, take your students to a nearby Christmas tree farm where all the conifers are just the right height for kids to touch and study, and where you can carry out a number of the activities described in this lesson.
5. As you explore the farm, or your school yard, have students identify each different tree species you encounter as pine, spruce, or fir. Collect a few, small twig clippings (with the tree farmer’s permission, of course!) of the conifers your students discover, and have them create a display poster back in the classroom. How many different kinds of conifers did they find?



Activity 2: Build a Christmas Tree Challenge

Materials Needed

- 6 green pipe cleaners
- 3 straws
- A handful of beads
- 1 sheet of dot stickers

- Ruler

Procedures

1. Read this aloud to the class: The town is looking for the biggest, prettiest Christmas tree for the tree lighting ceremony. The best tree can stand up by itself and it should be nice and tall. The decorations should be beautiful.
2. Tell they are going to construct the town Christmas tree using the materials you have given them (6 green pipe cleaners, 3 straws, a handful of beads (that will be the lights), and 1 sheet of dot stickers). Note: This can be modified for groups of 2.
3. Let the students brainstorm their ideas for building the tree.
4. Allows students to build their trees. This step can be timed to see how the students do with a time limit.
5. After the students have finished, provide rulers or measuring sticks to allow students to measure how tall their tree is.
6. Ask students to identify 2-D and 3-D shapes within their constructed Christmas trees (such as squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).
7. Take a record of all of the different measurements, and shapes provided by the models. Ask students to create a graph to display the information for the whole class. (This can also be demonstrated by the teacher).
8. Last, prompt the students to write a paragraph about their experience. Say, “Describe your solution to the problem. How did it work? Was it successful? What could you change to make it better?”

Activity 3: Christmas Trees Ag Mag Scavenger Hunt/Breakout EDU Box

Note for teachers: [Breakout EDU](#) games are educational experiences for students using lock boxes with various combinations. You can order your own [Breakout EDU kit](#), or you can create using your own purchased locks and boxes. Students will use the Scavenger Hunt to answer questions from the [NC Christmas Trees Ag Mag](#). Some of the answers will correspond to lock combinations. For example, if one of the answers is “TREES” that could correspond to an alpha lock, or if an answer is “blue” that could correspond to a color lock. Of course there are number locks, and shape locks too. If you do not have access to Breakout EDU boxes, you can still use the Scavenger Hunt worksheet in your classroom for other purposes.

The Scavenger Hunt and Answer Key is attached.

Sources

1. https://www.patriciatoht.com/uploads/9/7/6/3/97632046/pick_a_pine_tree_teachers_guide_.pdf
2. <https://agclassroom.org/matrix/lesson/536/>

K-5 Subject Areas: English Language Arts, Math, and Science

English Language Arts (Reading and Writing)

- RI.K.1 With prompting and support, ask and answer questions about key details in a text.
- RI.K.2 With prompting and support, identify the main topic and retell key details of a text.

- RI.K.3 With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.
- RI.1.1 Ask and answer questions about key details in a text.
- RI.1.2 Identify the main topic and retell key details of a text.
- RI.1.3 Describe the connection between two individuals, events, ideas, or pieces of information in a text.
- RI.1.4 Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.
- RI.1.5 Know and use various text features to locate key facts or information in a text.
- RI.1.6 Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.
- RI.1.7 Use the illustrations and details in a text to describe its key ideas.
- W.1.5 Participate in shared research and writing projects.
- RI.2.4 Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.
- RI.2.5 Know and use various text features to locate key facts or information in a text efficiently.
- RI.2.7 Explain how specific images contribute to and clarify a text.
- W.2.2 Write informative /explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section. a. With guidance and support from adults, organize information and ideas around a topic to plan and prepare to write. b. With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing.
- W.2.5 Participate in shared research and writing projects.
- W.2.6 Recall information from experiences or gather information from provided sources to answer a question.
- RI.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
- RI.3.2 Determine the main idea of a text; recount the key details and explain how they support the main idea.
- RI.3.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area.
- RI.3.5 Use text features and search tools to locate information relevant to a given topic efficiently.
- RI.3.7 Use information gained from illustrations and the words in a text to demonstrate understanding of the text.
- W.3.5 Conduct short research projects that build knowledge about a topic.
- RI.4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
- RI.4.2 Determine the main idea of a text and explain how it is supported by key details; summarize the text.
- RI.4.4 Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.
- RI.4.5 Describe the overall structure of events, ideas, concepts, or information in a text or part of a text.
- RI.4.7 Interpret information presented visually, orally, or quantitatively and explain how the information contributes to an understanding of the text in which it appears.
- W.4.5 Conduct short research projects that build knowledge through investigation of different aspects of a topic.
- RI.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
- RI.5.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.
- W.5.2 Write informative /explanatory texts to examine a topic and convey ideas and information clearly.
- W.5.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.

Math

- NC.K.MD.1 Describe measurable attributes of objects; and describe several different measurable attributes of a single object.
- NC.K.MD.2 Directly compare two objects with a measurable attribute in common, to see which object has “more of” “less of” the attribute, and describe the difference.
- NC.K.G.1 Describe objects in the environment using names of shapes, and describe the relative positions of objects using positional terms.
- NC.K.G.2 Correctly name squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres regardless of their orientations or overall size.
- NC.K.G.3 Identify squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres as two-dimensional or three-dimensional.
- NC.K.G.4 Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, attributes and other properties.
- NC.K.G.5 Model shapes in the world by: • Building and drawing triangles, rectangles, squares, hexagons, circles. • Building cubes, cones, spheres, and cylinders.
- NC.K.G.6 Compose larger shapes from simple shapes.
- NC.1.G.1 Distinguish between defining and non-defining attributes and create shapes with defining attributes by: • Building and drawing triangles, rectangles, squares, trapezoids, hexagons, circles. • Building cubes, rectangular prisms, cones, spheres, and cylinders.
- NC.1.G.2 Create composite shapes by: • Making a two-dimensional composite shape using rectangles, squares, trapezoids, triangles, and half-circles naming the components of the new shape. • Making a three-dimensional composite shape using cubes, rectangular prisms, cones, and cylinders, naming the components of the new shape.

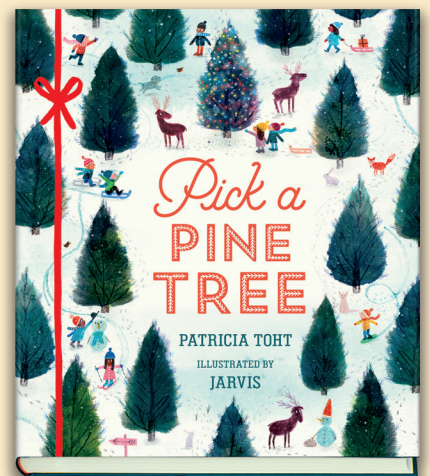
- NC.2.MD.1 Measure the length of an object in standard units by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
- NC.2.MD.2 Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.
- NC.2.MD.3 Estimate lengths in using standard units of inches, feet, yards, centimeters, and meters.
- NC.2.MD.4 Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.
- NC.2.G.1 Recognize and draw triangles, quadrilaterals, pentagons, and hexagons, having specified attributes; recognize and describe attributes of rectangular prisms and cubes.
- NC.3.G.1 Reason with two-dimensional shapes and their attributes. • Investigate, describe, and reason about composing triangles and quadrilaterals and decomposing quadrilaterals. • Recognize and draw examples and non-examples of types of quadrilaterals including rhombuses, rectangles, squares, parallelograms, and trapezoids.
- NC.4.MD.4 Represent and interpret data using whole numbers. • Collect data by asking a question that yields numerical data. • Make a representation of data and interpret data in a frequency table, scaled bar graph, and/or line plot. • Determine whether a survey question will yield categorical or numerical data.

Science

- 1.L.1 Understand characteristics of various environments and behaviors of humans that enable plants and animals to survive.
- 1.L.2 Summarize the needs of living organisms for energy and growth.
- 4.L.1 Understand the effects of environmental changes, adaptations and behaviors that enable animals (including humans) to survive in changing habitats.
- 5.L.2 Understand the interdependence of plants and animals with their ecosystem.

Pick a PINE TREE

Cut out the decorations, stick onto card and hang on your tree!





Ag in the Classroom

Post Office Box 27766 | Raleigh, NC 27611 | (919) 782-1705

North Carolina Ag Mag Christmas Trees Scavenger Hunt (3-5)

1. When did Christmas trees gain popularity in the United States?
2. Which type of tree do growers in the mountains of NC plant?
3. How many trees are growing in NC? How many growers are producing trees in NC?
4. Why is the Fraser Fir the most popular tree grown in NC?
5. What other tree species are used as Christmas trees?
6. Which one is your favorite and why?
7. Where is the White House Christmas tree displayed?
8. What is the most damaging natural enemy of Christmas trees?
9. What is "Trees for Troops"?
10. How many trees were donated to Fort Hood and the USCG Lower Mississippi River Station?
11. According to Avery Barr, how long does it take to grow a six to seven-foot tree?
12. There is a debate over real versus artificial trees. List at least 3 advantages and 3 disadvantages of each.

ncagintheclassroom.com



NC Farm Bureau Ag in the Classroom

@AgClassroom

@ncagintheclassroom



Ag in the Classroom

Post Office Box 27766 | Raleigh, NC 27611 | (919) 782-1705

North Carolina Ag Mag Christmas Trees Scavenger Hunt (3-5)

1. When did Christmas trees gain popularity in the United States? **1856, when President Franklin put one in the White House**
2. Which type of tree do growers in the mountains of NC plant? **Fraser Fir**
3. How many trees are growing in NC? How many growers are producing trees in NC? **50 million trees; 1300 growers**
4. Why is the Fraser Fir the most popular tree grown in NC? **The mountains of NC provide the perfect conditions: cooler climate, plentiful rainfall. The Fraser fir is shade tolerant and enjoys rocky soil.**
5. What other tree species are used as Christmas trees? **White Pine, Virginia Pine, Leyland Cypress, Blue Ice, Carolina Sapphire**
6. Which one is your favorite and why? **Answers vary**
7. Where is the White House Christmas tree displayed? **The Blue Room**
8. What is the most damaging natural enemy of Christmas trees? **Balsam woolly adelgid (aphid)**
9. What is "Trees for Troops"? **A program that donates trees to military personnel**
10. How many trees were donated to Fort Hood and the USCG Lower Mississippi River Station? **800**
11. According to Avery Barr, how long does it take to grow a six to seven-foot tree? **12 years of labor**
12. There is a debate over real versus artificial trees. List at least 3 advantages and 3 disadvantages of each. **Answer vary (use graphic in Ag Mag)**

If using with Breakout boxes, here are some possible lock combinations:

Word lock: TREES

4-digit lock: 1856

3-digit lock: 800

Color lock: BLUE dots

ncagintheclassroom.com

 NC Farm Bureau Ag in the Classroom

 @AgClassroom

 @ncagintheclassroom