

Teaching Guide to *Shortcuts* by Jeff Harris

Introduction

Shortcuts by Jeff Harris is a beautifully illustrated, fact-packed page that makes learning fun. Each week, *Shortcuts'* multicultural cast (Juanita, K., Roland, Junior and James) offers facts, riddles, jokes and puzzles to help kids learn about science, geography, animals, food, history and holidays.

Each teaching guide provides ideas for expanding the lesson and creating discussion and learning activities for your students. The grade level for the guides is usually 3rd to 4th, but they can be adapted for use at other levels. The guides are broken down into four areas:

1. Questions for Discussion and Further Study

Designed to help students think and research, not just give one-word answers

2. Activity Ideas

Designed to allow students to be creative and teach themselves

3. Use the News

Designed to have students use the news in studying each topic

4. Quick Quiz

Designed to be adaptable to several grade levels, evaluate students' comprehension and build vocabulary and math skills

You might use the teaching guides in the following ways:

Questions for Discussion and Further Study: Engage the entire class by asking each question aloud and listing the students' answers on the board. Or have them use reference resources to give their own answers to the questions. Allow them to discuss other students' answers after they've researched the topics. Key words or phrases that can help students search for more information are italicized.

Activity Ideas: Give the students a time limit to research their projects, using library or study time. By having the students cite their resources you can check their work; or, alternatively, tell them which resource(s) you prefer them to use.

Use the News: These can be worked on individually but we suggest they work in groups to learn teamwork skills.

- **Quick Quiz:** We suggest you review the quizzes ahead of time and change the phrasing or difficulty level based on the students' abilities.

Shortcuts: LOOKING UP PINE TREES

For release the week of: June 3, 2013

Objective: After completing the exercises, students should have a better understanding of pine trees.

Subject Areas: The following information about pine trees will be discussed:

- Why are they used as Christmas trees?
- Various types of pine trees
- Why do they release seeds in a fire?

Evaluation: Students may be evaluated using the following point scale:

Four points: Information is accurate, organized, shows creative thought/use of materials

Three points: Information is accurate and organized

Two points: Information is mostly accurate; organization needs some work

One point: Significant inaccuracies; lacks organization

Topics for Discussion and Further Study

1. Why are pine trees used as Christmas trees?
2. Do all pine trees keep their needles year-round?

Activity Ideas

- There are many different types of softwood or pine trees. Each has characteristics making it distinct from other pines. Learn about the various types by collecting pictures of each to include on a poster about pine trees. Include a brief description of each tree you include on your poster.
- Why does a pine tree release its seeds only after a fire? How could this adaptation help it survive? Research and report on how fire helps a pine tree survive in the forest.

Use the News

- Pine trees are one of the most important sources of wood for construction used around the world. Is there construction going on in your area? Read your newspaper for articles about new buildings and houses being constructed. Where are they going up? What type of building is it? Are costs mentioned? Is new house construction increasing or decreasing? Why?

Answers to the Quiz

1.) b, 2.) c, 3.) a, 4.) a, 5.) a, 6.) d, 7.) conifers, 8.) resin, 9.) 26 ft., 10.) same

Quick Quiz — Pine trees

- Pollinated male cones produce seeds.
a. True b. False
- Most of the cones found under a pine tree are _____ cones.
a. large b. small c. female d. male
- Pine trees are used to make paper.
a. True b. False
- Ponderosa and _____ pines trees are some of the tallest types of pine trees.
a. Sugar b. Bristlecone c. Larch d. Jack
- Bristlecone pine trees are among the oldest living things on earth.
a. True b. False
- Nearly all the many types of pine trees grow naturally only in the _____ hemisphere.
a. Eastern b. Western c. Southern d. Northern

Vocabulary Comprehension

- Pine trees are in a group of trees called _____, which means they produce cones.
- Many pine trees produce _____, which is used to produce materials such as paint.

Math Comprehension (subtraction, division, addition, fractions)

- How tall is a young tree that is $\frac{1}{10}$ the height of a 260-ft. tree?
- Which is bigger, a 2-ft. cone or a 24-inch cone?