

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: SETTING OUT WITH SAILING SHIPS

For release the week of: January 21, 2013

Objective: After completing the exercises, students should have a better understanding of sailing ships.

Subject Areas: The following information about sailing ships will be discussed:

- Nautical terms
- Steam versus sail power
- Sailing techniques

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. What is a knot? Why would a sailor use the term? What is its origin?
2. What is a fathom?

Activity Ideas

- Why did steamships replace sailing ships in the 1800s? Were they faster? Wind power is free. Why would steamships be preferred? Research and report on this change in technology.
- How does a sailing ship travel in a direction that goes against the wind? If the ship needs to go north, but the wind is blowing from the north, how does it get to its destination? Research sailing techniques and write a solution to the problem. Include a diagram.

Use the News

- Why was travel by water so important before the 20th century? What forms of transportation do we use today? Identify any of these forms as you read your newspaper. Which form seems most important today?

Answers to the Quiz

1.) a, 2.) a, 3.) b, 4.) a, 5.) a, 6.) d , 7.) junk, 8.) Triangular, 9.) 11, 10.) 288 miles

Quick Quiz — sailing ships

1. The cog was a type of sailing ship that was introduced sometime in the 1200s.
a. True b. False

2. The _____ created sailing ships made of wooden planks around 3000 B.C.
a. Egyptians b. Chinese c. Italians d. Vikings
3. One big sail is easier to handle than several smaller ones.
a. True b. False
4. _____ combined the capacity of a cargo ship with the strength and firepower of a warship.
a. Galleons b. Cogs c. Clippers d. Junks
5. Vikings built excellent sailing ships.
a. True b. False
6. The _____ is at the front of the ship.
a. mainmast b. mizzenmast c. fullmast d. foremast

Vocabulary Comprehension

7. A Chinese ship is called a _____.
8. _____ shaped sails called lateens were first used in the Mediterranean more than 800 years ago.

Math Comprehension (subtraction, division, addition, fractions)

9. If a clipper with 30 sails was only using 19 of them, how many were unused?
10. If a ship is sailing 12 miles per hour for a whole day, how far will it have traveled?