

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: REMEMBERING THE TITANIC

For release the week of: April 9, 2012

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

Subject Areas: The following information about the Titanic will be discussed:

- Causes and mechanics of the sinking
- Survival
- Steam engines

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. In 1912, how were ships supposed to avoid icebergs? What technology did they have?
2. Why didn't more people survive by floating with their life vests?

Activity Ideas

- Why did the iceberg create such a large hole in the Titanic, and why was it broken in half when it was discovered at the bottom of the ocean? Research how the ship sank and broke apart. Write a description of its demise.
- The Titanic was powered by steam engines burning coal. How does a steam engine work? Research, describe, and diagram a steam engine. You may want to research and build a small model steam engine.

Use the News

- Write a brief news announcement, either reporting the launch of the Titanic, or the sinking. Be sure to include a news story's "who, what, where, why, and when."

Answers to the Quiz

1.) b, 2.) a, 3.) a, 4.) a, 5.) a, 6.) b , 7.) iceberg, 8.) Ireland 9.) 1/3 , 10.) 5

Quick Quiz — The Titanic

1. The wreck lies about 700 km southeast of Ireland.
a. True b. False

2. It took a little more than _____ to complete the construction of the Titanic.
a. two months b. ten months c. two years d. ten years
3. When the Titanic was built, it was the largest ship in the world.
a. True b. False
4. Titanic's steam engines were powered by _____.
a. coal b. wood c. electricity d. oil
5. The ship's hull was divided into 16 separate, watertight compartments.
a. True b. False
6. The Titanic had _____ the lifeboats it needed.
a. 1/3 b. 1/2 c. 1/4 d. all

Vocabulary Comprehension

7. The impact with the _____ breached at least five compartments.
8. The Titanic was constructed in Belfast, _____.

Math Comprehension (subtraction, division, addition, fractions)

9. Twenty out of a total of 60 lifeboats is what fraction of the total?
10. If a lifeboat could hold 30 people, how many boats would be needed for 125 people?