

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: TARGETING ARCHERY

For release the week of: December 3, 2012

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

Subject Areas: The following information about archery will be discussed:

- Compound bows
- How are bows made?
- Target sports

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. How do you aim a bow?
2. How does a compound bow work?

Activity Ideas

- A bow's shooting power determines how fast an arrow will travel and how deeply it can penetrate its target. The bow's power is measured in pounds. In other words, the force needed to pull a 50-pound bow is similar to the strength needed to lift a 50-pound weight. A light bow might require 20 or 25 pounds. Could you lift that? If possible, bring in objects (or real weights) that weigh anything from about 10 to 50 pounds. Put one on the floor, lean over it and try to pull it up to your body with one arm, just like pulling a bowstring. Try it with heavier and heavier weights. How long can you hold it up? A hunter sometimes has to hold this position till his or her target comes into position.
- A person that makes bows is called a bowyer. How do they make bows? What is it made out of? Research this activity on the Internet and watch videos demonstrating how a bowyer performs his craft.

Use the News

- Archery is just one of many “target” sports. What are some others? Brainstorm a list and then search your newspaper for articles or scores about these sports as reported in the news.

Answers to the Quiz

1.) b, 2.) b, 3.) b, 4.) c, 5.) a, 6.) d, 7.) nock, 8.) fletches, 9.) 125 m., 10.) \$381

Quick Quiz — Archery

1. The recurve bow was the first type of bow invented.
a. True b. False
2. A _____ bow uses pulleys to make the bow easier to hold in the fully drawn position.
a. recurve b. compound c. long d. short
3. Bows have been the main type of weapon used in battle until the 1900s.
a. True b. False
4. The container used to carry arrows is called the _____.
a. sliver b. nock c. quiver d. bowyer
5. A longbow is a simple, straight-shaft bow.
a. True b. False
6. The place where the bowstring meets the arrow is called the _____ point.
a. arrow b. bow c. stringing d. nocking

Vocabulary Comprehension

7. The tail end of an arrow is called the _____.
8. The feathers on the end of an arrow are called _____.

Math Comprehension (subtraction, division, addition, fractions)

9. How much farther will an archer have shot if she first shoots 175 m. and then shoots 300 m.?
10. If the price of a bow was \$345, and 3 arrows cost \$12 apiece, how much would it all cost?