### 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 3<sup>rd</sup> to 4<sup>th</sup>, 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:** STITCHING TOGETHER THE STORY OF CLOTH

For release the week of: September 24, 2012

<u>Objective</u>: After completing the exercises, students should have a better understanding about cloth.

**Subject Areas:** The following information about cloth will be discussed:

- Common materials used for your clothes
- Modern looms
- Uses of cloth

**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 are materials, such as silk, wool, or flax, turned into yarn?
- 2. What do modern factory looms look like? How do they work? Search for a video.

## **Activity Ideas**

- How many types of cloth are around you? Do you have linen at home? Wool? Ask your parents for examples of different types of clothing material to show in class. Then spread them out on a class table to examine and identify. Check the labels on your own clothes. What type of cloth is most common? After examining different cloths, can you identify the material in them?
- Here's a fun weaving activity, only you'll be weaving pictures instead of yarn. You'll need to print two copies of the same picture of anything you want. For an interesting effect, you may want to print one in color and the other in black and white. Next, you'll cut one in vertical strips and the other in horizontal strips. Finally, weave them together into the original picture and glue as you go. Here are the detailed instructions with images to guide you.

http://scrapbooking.about.com/library/weekly/blphotoweaving.htm

### **Use the News**

• Besides clothes, what else is cloth used for? Read the newspaper to find other examples of the uses of cloth. Make a list, or just share what you find with the class.

## **Answers to the Quiz**

1.) a, 2.) b, 3.) a, 4.) a, 5.) b, 6.) d, 7.) spinning, 8.) linen 9.) 2, 10.) 9 sq. ft

## **Quick Quiz — Cloth**

1. Archaeologists believe humans have been creating cloth for more than 25,000 years. a. True b. False
2. Textile is another word for a. cotton b. cloth c. yarn d. loom
3. Most natural-fiber cloth is made with cotton. a. True b. False
4. The process of turning yarn into cloth is called  a. weaving b. spinning c. warping d. sewing
5. A "boom" is a device that is used to weave yarn into cloth. a. True b. False
6. The strands of yarn that weave across the warp are called the  a. weep b. woof c. wool d. weft
Vocabulary Comprehension
7. The process of twisting fibers into yarn is called
8. Fibers from the flax plant are used to make
Math Comprehension (subtraction, division, addition, fractions)
9. How many yards of cloth would you need to buy for something 39 inches long?
10. How many square feet of cloth are there in one square yard?