

# 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: GETTING THE JUMP ON GRASSHOPPERS**

For release the week of: June 8, 2009

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

**Subject Areas:** The following information regarding grasshoppers will be discussed:

- Parts of the grasshopper's body
- Swarming behavior
- Insect recipes

**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. Some people eat grasshoppers and other insects. Find a grasshopper/insect recipe to print out and post in the classroom?
2. Are grasshoppers or locusts dangerous to humans?

## Activity Ideas

- What does a grasshopper look like up close? Draw a diagram or build a model of a grasshopper. Label its parts and describe what they do.
- What does a locust swarm look like? There are many videos on the Internet showing swarming activity. Search and view some of these to really see their individual size, and the size and behavior of the swarm. Here's one of a family that stopped their car in the middle of a swarm. (teacher warning: The young child in the car gets very scared and cries out!) <http://www.youtube.com/watch?v=wxHOxCmbs-8&feature=related>

### Use the News

What kind of newspaper comic could you draw about a grasshopper? They could make funny characters. What will yours say and do? Draw a single panel or multi-panel comic strip. Example: What would school be like if people looked like grasshoppers?

## Answers to the Quiz

1.) b, 2.) c, 3.) b, 4.) c, 5.) a, 6.) d, 7.) spiracles, 8.) swarms, 9.) 21, 10.) 3ft, 4in

## Quick Quiz — Grasshoppers

1. Grasshoppers live on all seven continents.

a. True b. False

2. A grasshopper can leap about \_\_\_\_ times its body length.

a. 5                      b. 10

c. 20                     d. 50

3. There are only about five different species of grasshoppers.

a. True b. False

4. Grasshoppers have \_\_\_\_ eyes.

a. 2                      b. 4

c. 5                      d. 8

5. Some grasshoppers are more than 7 inches in length.

a. True b. False

6. Grasshoppers use their antennae to sense \_\_\_\_\_.

a. sounds                b. smells

c. humidity             d. all of the above

### ***Vocabulary Comprehension***

7. Grasshoppers breathe through small holes called \_\_\_\_\_.

8. When there is not much food, locusts form huge groups called \_\_\_\_\_.

### **Math Comprehension (subtraction, division, addition, fractions)**

9. If a swarm of locusts ate 3,000 kilograms of vegetation in an hour, how many thousands of kilograms would they eat in 7 hours?
  
10. A 2-inch grasshopper jumping 20 times its length would jump how far (in feet and inches)?