

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 TO THE ROOT OF GRASS

For release the week of: July 13, 2009

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

Subject Areas: The following information regarding grass will be discussed:

- Lawn care
- Types of grasses and their uses
- Factors affecting growth

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 weed?
2. Does grass die in the winter? Why or why not?

Activity Ideas

- How fast does grass grow? How much water does it need? How much light does it need? Use some lawn grass seeds to design an experiment to examine these questions and any others you think of. Foil pans or egg cartons make good plant trays. Label each group you're testing, such as "light-8hrs pr day, light-2hrs pr day, water-once per week, water-once a day, etc." Record daily or weekly observations in a journal. We're used to seeing our lawns neatly cut. What does the grass look like when fully grown? How tall will it get if it isn't cut?
- There are many different grasses and many different uses for them. Choose a grass, such as corn or bamboo, research it and write a brief report on what its uses are. Include pictures as well as written descriptions of the grass type and how it is used by humans.

Use the News

Lawn care is big business in today's society. Water use, pesticides, herbicides, and pollution from gas-powered lawnmowers are hard on the environment. Write a "hints and tips" type of newspaper article about how we can have a nice yard without abusing the world we live in.

Answers to the Quiz

1.) a, 2.) c, 3.) a, 4.) d, 5.) a, 6.) a, 7.) rhizomes, 8.) stolons, 9.) 87in , 10.) 7'3"

Quick Quiz — Grass

1. There are more than 6,000 types of grass.
a. True b. False
2. A single leaf of a grass plant is called a _____.
a. sheaf b. petal c. blade d. culm
3. Some grasses can grow 100 ft tall.
a. True b. False
4. The tallest members of the grass family are _____ grasses.
a. crab b. cereal c. node d. woody
5. Many grasses have flowers.

a. True b. False

6. Sorghum is a type of _____ grass.

a. cereal b. crab c. woody d. lawn

Vocabulary Comprehension

7. Grasses that spread underground have stems called _____.

8. Grasses that spread above ground have stems called _____.

Math Comprehension (subtraction, division, addition, fractions)

9. If a bamboo plant grew 3 inches a day for 29 days, how many inches tall would it be?

10. How many feet and inches would the above answer be?