

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 DANDELIONS

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

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

- What's a weed?
- Uses of dandelions
- Life cycle of a dandelion

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. Herbicides are often used to kill dandelions. Are there any environmentally friendly ways to get rid of them?
2. Why are some plants called weeds?

Activity Ideas

- What are the various uses of dandelions? How do you make coffee from the roots of dandelions? Research these ideas and others, and then write a report or make a presentation about one of the ways dandelions can be useful.
- Make a dandelion display in which the various parts of the plant are labeled, and several stages in the plants growth are displayed. The cycle of stages could include: the single seed, a young plant, a budding plant, a flowering plant, puffball stage, and after the release of the puffball seeds. The various plants could be glued or taped to a paper or cardboard backing.

Use the News

- What springtime gardening news is being reported in the newspaper? Read and summarize an article about plants and gardening from a newspaper. Make footnotes with definitions and descriptions of words or plants spoken about in the article. These extra notes will help readers better understand the report.

Answers to the Quiz

1.) a 2.) d, 3.) a, 4.) a, 5.) a, 6.) a, 7.) florets, 8.) taproot, 9.) 30 cm , 10.) 30

Quick Quiz — Dandelions

1. Dandelion flowers close up each night.
a. True b. False

2. Dandelion _____ are topped with feathery hairs called pappuses.
a. flowers b. stems
c. roots d. seeds

3. Companies in some countries grow and sell dandelions.
a. True b. False

4. The seed case of a dandelion is covered with tiny _____.
a. hooks b. holes
c. roots d. spots

5. Some people use dandelions as a type of medicine.
a. True b. False

6. Each floret in a blossom will produce _____ seed/s.
a. one b. two
c. four d. ten

Vocabulary Comprehension

7. A dandelion blossom is a cluster of tiny flowers called _____.
8. The thick center root is called the _____.

Math Comprehension (subtraction, division, addition, fractions)

9. If a dandelion taproot is 90 cm long, how long is $\frac{1}{3}$ of that?
10. If there are 120 blossoms, with 4 blossoms on each plant, how many plants are there?