

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: SEARCHING FOR STICK INSECTS

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

Subject Areas: The following information about stick insects will be discussed:

- Nocturnal activity
- Species of stick insects
- Animal camouflage

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. Do any stick insects fly?
2. Why do you think most stick insects are active mainly at night?

Activity Ideas

- There are more than 3,000 different kinds of stick insects. Research a list of them, choose one, and write a description of it. How is it different from other stick insects? How big is it? Where does it live?
- A stick insect's body is camouflaged from predators. What kinds of camouflage do other insects and animals have? Make a list of creatures you research, and write a brief description of each.

Use the News

- There are some species of stick insects that are all female. Are there any groups or organizations that are all-female in our society? Read the newspaper for examples of groups of people that gather only as one gender. Are there any groups that could be of both sexes, but just seem to always be either male or female? Why do you think people divide up this way sometimes?

Answers to the Quiz

1.) a, 2.) c, 3.) b, 4.) a, 5.) b, 6.) d , 7.) herbivores, 8.) ghostly 9.) 11 cm 10.) 11

Quick Quiz — Stick Insects

1. Some species of stick insects are only female.
a. True b. False
2. Some stick insects will “play _____” if they feel threatened.
a. ball b. mad c. dead d. together
3. Male stick insects are usually larger than females.
a. True b. False
4. Some stick insects live for as long as _____ years.
a. two b. four c. ten d. twenty
5. During the long night hours, most stick insects remain motionless.
a. True b. False
6. A stick insect's main method of defense from predators is _____.
a. venom b. flight c. size d. camouflage

Vocabulary Comprehension

7. Stick insects are plant eaters, or “_____.”
8. The stick insect order is called “Phasmatodea,” which is Greek for “unusual sight” or “_____.”

Math Comprehension (subtraction, division, addition, fractions)

9. If an insect grows from 3 cm to 14 cm, how many more centimeters did it grow?
10. 33 insects divided into 3 equal groups would mean there were how many in each group?