

# 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: AT HOME WITH HAMMERHEAD SHARKS**

For release the week of: December 9, 2013

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

**Subject Areas:** The following information about hammerhead sharks will be discussed:

- Who was Stefano Lorenzini?
- Why do some sharks gather in huge “shivers”?
- Shark jokes ;)

**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. Why are some people called “sharks”? ie. Cardshark, poolshark
2. Who was Stefano Lorenzini?

## **Activity Ideas**

- Why do some types of hammerheads form large groups, or “shivers”? Are they especially dangerous when in these large groups? Research and report on their social grouping behavior.
- Check out these shark jokes. Choose a few good ones and explain the answer. Some may take some research to figure out. <http://rubbercat.net/text/sharkjokes.html>

## **Use the News**

- What science news can you find in the newspaper? Is there anything about the oceans? Read the newspaper for science news and share any appropriate articles you find. A written summary could be created, or you could share your information orally with the class or a small group.

## **Answers to the Quiz**

1.) a, 2.) d, 3.) b, 4.) c, 5.) a, 6.) a , 7.) sense, 8.) wing, 9.) 5 ft., 10.) 5

## **Quick Quiz — hammerhead sharks**

1. The winglike shape of a hammerhead's head helps the shark to swim.  
a. True b. False

2. The winghead shark has a “hammer” that measures nearly \_\_\_\_\_ the length of its body.  
a. 1/10 b. 1/8 c. 1/4 d. 1/2
3. Hammerheads are found in cold waters around the world.  
a. True b. False
4. A group of hammerheads is called a \_\_\_\_\_.  
a. pod b. herd c. shiver d. pool
5. Stingrays are one of the hammerhead shark's favorite types of prey.  
a. True b. False
6. Newborn hammerhead sharks are called \_\_\_\_\_.  
a. pups b. hammers c. flips d. kits

## Vocabulary Comprehension

7. The wide head of a hammerhead has \_\_\_\_\_ organs called “ampullae of Lorenzini.”
8. The flattened, \_\_\_\_\_-shaped head of a hammerhead shark is called a “cephalofoil.”

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

9. How many feet long would a young shark be if it were  $\frac{1}{4}$  the length of a 20-ft. adult hammerhead?
10. If 40 pups were divided into 8 equal groups, how many would be in each group?