



# Discussion Guide for

## DOLPHINS, THE ENVIRONMENT AND YOU

### OBJECTIVES

- To describe how dolphins are very intelligent animals with complex social behaviors.
- To compare the similarities between dolphins and human beings.
- To detail how the future of dolphins is threatened by global fishing and pollution.
- To illustrate ways in which everyone can help to clean up existing pollution and prevent future pollution.

### SYNOPSIS

Beneath the ocean's surface live 95% of the world's animals and plants. The ocean is linked to all the earth's ecosystems through rain, rivers and streams. No matter where we are, we're all connected through our environment to pods of dolphins, the ocean, and the rest of the creatures that live there.

Dolphins, the Environment and You explores the world of the dolphin through the efforts of the Wild Dolphin Project's Protect-a-Pod program. In the warm waters of the Bahamas, camera crews record the behavior of a pod of wild, Atlantic spotted dolphins while scientists study their complex social behaviors. The project's goals include observing individual dolphins over many years in order to learn as much as possible about their life-long activities.

So far, scientists know that dolphins and people are alike in many ways, with one important difference in behavior. The choices that we make either help or hurt dolphins and the waters where they live. For generations mankind has polluted the global environment, and such pollutants-chemicals and trash-find their way into the ocean either directly or indirectly.

The program encourages viewers to become aware of how common activities like washing a car can have an adverse effect on dolphins and other wildlife. Becoming active in cleaning up and preventing pollution can go a long way toward protecting these magnificent mammals.

### QUESTIONS TO ASK BEFORE VIEWING

1. What do you already know about dolphins?
2. How are dolphins and other sea creatures adversely affected by global fishing and pollution?
3. What can you do to help clean up pollution and prevent future harm to our environment?

### QUESTIONS TO ASK AFTER VIEWING

1. What are phytoplankton? (They are microscopic plants that capture sunlight and transform inorganic substances into food for tiny animals that are eaten by bigger animals, then bigger animals. They are the base of the sea's food web.)
2. What do we have in common with dolphins? (We are mammals, warm-blooded creatures that need to maintain a constant body temperature. We need to breathe air and are born with hair, which dolphins have almost completely lost except for a few whiskers. We both have and nurse live young.)
3. How long will a dolphin calf stay with its mother? (For over three years.)
4. How can you tell male and female dolphins apart? (The female's mammary glands, which produce milk, are on her ventral, or underside, tucked within slits on either side of a larger slit. The male dolphin has two slits on his ventral side.)
5. In the program, how do scientists identify each dolphin they study? (Every dolphin is photographed below and above the water. Then the team looks for identifying marks.)
6. How do pregnant and nursing mothers spend most of their time? (They need to eat constantly, and forage and hunt with other mothers while teaching their young calves how to find food.)
7. Atlantic spotted dolphins go through four distinct phases in their lives. What are the names for these phases? (Two-tone, speckled, mottled, and adult.)
8. Describe how a spotted dolphin looks and acts during the first stage. (Up until about three or four years of age, they have no spots. They nurse and stay very close to their mothers.)
9. Describe the second stage. (During the "speckled" stage, when they are juveniles, dark spots form on their bellies and sides. This is the time when they start exploring the world and making friends. Both females and males often baby-sit at this age.)
10. Describe the third stage. (In the "mottled" phase, light spots appear on the upper portion of the body and dark spots increase on the ventral side. At this stage, females may have their first calf.)
11. Describe the last stage. (As frill adults, the dolphin's white and dark spots fuse, or merge together, and form permanent patterns. By this fused stage, they have formed long-term bonds with each other which will



# Discussion Guide for

## DOLPHINS, THE ENVIRONMENT AND YOU

last the rest of their lives, an estimated 50 years. Also, the tip of an adult spotted dolphin's rostrum often turns white.)

12. According to the program, what might be one reason why dolphins have evolved into such social and intelligent animals? (The pressure from the constant threat of shark attack.)

13. What are some of the communication signals dolphins use with each other? (High-pitched whistles, clicks, chirps and bubble-blowing.)

14. What is a spectrogram and how does it help scientists study dolphin communication? (It's a computer which takes recorded sounds and generates an image of the sound. This gives researchers a picture of each sound a dolphin makes, allowing for comparison.)

15. How do dolphins fit into the "food web"? (Dolphins are top predators, feeding on larger fish, that have fed on smaller fish, that have fed on even smaller fish, that eat plankton.)

16. Why is international fishing a threat to dolphins? (Dolphins get tangled up in fishing nets and die from injury or drowning.)

17. List some of the kinds of pollution that threaten dolphins and other sea creatures. (Marine debris and chemical runoff that gets into the ocean from cities; trash dropped from boats or left at the beach. Plastics are especially bad because they can become wrapped around a body or swallowed.)

18. What kinds of chemical pollution are dumped at sea or enter it from rivers and streams? (Biological toxins such as sewage, or chemical, such as pesticides, agricultural run-off, and oil.)

19. What happens to toxins once they are in the water? (The toxins don't disappear. They are absorbed by the sea's plants and animals. As one fish eats another, these toxins move up the food pyramid and become more concentrated in each larger animal in a process called bioaccumulation. Animals at the top of the food pyramid are at the greatest danger of being poisoned.)

20. Name the Five Rs of preventing pollution. (Reduce, re-use, recycle, re-think and reach out.)

21. Define each one. (Reduce the amount of trash you use. Tell stores and restaurants that you don't want excess packaging. Re-use and pass on items that can be shared. Recycle as much trash and household chemicals as you can. Re-think how your actions create a chain reaction. Reach out. The most important thing you can do is to educate and alert other people about how their daily choices affect the environment.)

### RELATED TITLES IN THE AIMS COLLECTION

- 1-8886SG Dolphins and How They Live
- 1-8882SG Beneath the Caribbean
- 1-8846SG Beneath the South Pacific
- 1-8584SG A User's Guide to Planet Earth: The American Environment Test
- Protecting Our Environment Series: Reduce; Reuse; Recycle

### PROGRAMS DETAILS

#### LENGTH:

28 minutes

#### SUBJECT AREAS:

Science

#### AUDIENCE LEVELS:

Intermediate-Adult

#### ORDER NUMBER:

1-9264SG

### CANADIAN LEARNING COMPANY

95 VANSITTART AVENUE  
WOODSTOCK, ON N4S 6E3

[INFO@CANLEARN.COM](mailto:INFO@CANLEARN.COM)

TEL:(800) 267 2977

FAX:(519) 537 1035

