

Third Grade Manatee Curriculum—Lesson 14: Reviewing What We Know about Manatees¹

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Description

Students will take quizzes to see how much they have learned about manatees.

Objective

By the end of the activity, students will be able to answer correctly at least 10 questions about manatee biology.

You Will Need

- Copies of the Manatee Quiz (either in paper format, using audience response clickers, or as a PowerPoint—whichever format will work best for your class)
- KWL chart from Lesson 1. (KWL = know, want, learn [i.e., what I *know*, what I *want* to know, and what I *learned*])

Strategy

1. This quiz can be used in several different ways:
 - It can be used as a pre-test before the manatee curriculum is started, then as a post-test towards the end of the manatee lessons.
 - It can be given as a paper quiz where students read the question and choose from possible answers.

- Questions can be imported into an audience-response program (e.g., TurningPoint) and used with “clickers.” Correct answers and explanations are provided. If a paper format is used, you can review the correct answers after returning the graded quizzes to the students.
2. Grade the students’ quizzes and review the correct answers. How many students were Newbie Newborns (0–6 correct), how many were So-So Seacows (7–11 correct), and how many were Sirenian Smarties (12–15 correct)?
 3. Bring out the KWL chart from the beginning of the curriculum. Have the students give you information to fill in the L (what I learned) portion of the chart. Review the Ws (what I want to know) and make sure that all of the information the students said they wanted to learn has been covered. Do students have any new Ws to add to the chart? If there are still questions to be answered, have students conduct research to try and find the answers to their questions. Credible sources of information include the Florida Fish and Wildlife Conservation Commission, Save the Manatee Club, US Fish & Wildlife Service, the Sirenia Project, National Geographic, Scholastic, PBS, and Arkive.

Thanks to the Save the Manatee Club for sharing their kids’ quizzes.

1. This document is VM217, one of a series of the Veterinary Medicine—Large Animal Clinical Sciences Department, UF/IFAS Extension. Original publication date July 2015. For more lessons in the *Third Grade Manatee Curriculum* series, go to http://edis.ifas.ufl.edu/topic_series_third_grade_manatee_workbook. Visit the EDIS website at <http://edis.ifas.ufl.edu>.
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MANATEE QUIZ

Name: _____

(circle the correct answer)

1. What animal is one of the manatee's closest relatives?
 - a. Alligator
 - b. Elephant
 - c. Seal
 - d. Cow

2. That was an easy one—now for a really big question. How much does an adult male manatee weigh?
 - a. 500 pounds
 - b. 1,000 pounds
 - c. 5,000 pounds

3. You live in a house. A bear lives in the forest. Where do manatees live?
 - a. On the beach
 - b. In the forest
 - c. In the water

4. Now for our favorite topic: food! Which of the following types of food are manatees most likely to eat?
 - a. Seagrass
 - b. Fish
 - c. Potato chips

5. Manatees are mammals, so they have to breathe air, like you do. How long can manatees hold their breath underwater?
 - a. 5 minutes
 - b. 20 minutes
 - c. 45 minutes

6. Moving on...let's talk about speed. A dolphin can swim 24 miles per hour. A sea turtle swims at about 10–12 miles per hour. How fast can a manatee swim?
 - a. 5–10 miles per hour
 - b. 15–20 miles per hour
 - c. 30–40 miles per hour
7. Let's pretend you are a scientist and want to do some manatee research work. Where would you find manatees in the winter?
 - a. Resting on the beach
 - b. Snoozing in a warm water area, like a spring or power plant outflow
 - c. Swimming 5–10 miles out at sea
8. How long can manatees live?
 - a. 20 years
 - b. 60 years
 - c. 100 years
9. Manatees are sometimes called by another name. Do you know what it is?
 - a. Sea cow
 - b. Dugong
 - c. Mermaid
10. Okay, open wide! Do manatees have teeth?
 - a. Yes
 - b. No
11. Time to put on your thinking cap: we know manatees are mammals because they have
 - a. Hair
 - b. Feathers
 - c. Scales
 - d. All of the above
12. Manatees have lots of body fat.
 - a. True
 - b. False

13. Sometimes kids can really chow down. But we think manatees have you beat. How much can a manatee eat in one day?
 - a. 5 pounds
 - b. 100 pounds
 - c. 500 pounds
 - d. 1,000 pounds
14. All right, let's get down to the bare bones—manatee bones, that is. The bones in a manatee's flipper are similar to a
 - a. Human hand
 - b. Dog's paw
 - c. Fish's fin
15. Okay, let's get serious. Which of the following things can be harmful to manatees?
 - a. Plastic bags
 - b. Fishing line
 - c. Fishing hooks
 - d. All of the above

MANATEE QUIZ—Teacher Version (with answers)

1. What animal is one of the manatee’s closest relatives?

- a. Alligator
- b. **Elephant**
- c. Seal
- d. Cow

Correct answer: b (elephant)—The manatee has a body shape similar to a seal, but the manatee is actually related to the elephant and the hyrax, a small, gopher-sized animal!

2. That was an easy one—now for a really big question. How much do you think an adult male manatee weighs?

- a. 500 pounds
- b. **1,000 pounds**
- c. 5,000 pounds

Correct answer: b (1,000 pounds)—The average adult manatee is about 10 feet long and weighs between 800 and 1,200 pounds. How many kids your size would it take to equal one manatee?

3. You live in a house. A bear lives in the forest. Where do manatees live?

- a. On the beach
- b. In the forest
- c. **In the water**

Correct answer: c (in the water)—Manatees are aquatic animals and prefer waters that are three to seven feet deep. They are found in the coastal waters of the southeastern United States.

4. Now for our favorite topic: food! Which of the following foods are manatees most likely to eat?

- a. **Seagrass**
- b. Fish
- c. Potato chips

Correct answer: a (seagrass)—Manatees are herbivores—they eat aquatic plants like seagrass.

5. Manatees are mammals, so they have to breathe air, like you do. How long do you think manatees can hold their breath underwater?

- a. 5 minutes
- b. **20 minutes**
- c. 45 minutes

Correct answer: b (20 minutes)—When manatees are using a great deal of energy, they may surface to breathe as often as every 30 seconds. When resting, manatees have been known to stay underwater for up to 20 minutes. How long can YOU hold your breath underwater?

6. Moving on...let’s talk about speed. A dolphin can swim 24 miles per hour. A sea turtle swims at about 10–12 miles per hour. How fast can a manatee swim?

- a. 5–10 miles per hour
- b. **15–20 miles per hour**
- c. 30–40 miles per hour

Correct answer: b (15–20 mph)—Manatees are slow-moving animals. They can swim up to 20 miles per hour in short bursts, but they usually only swim 3–5 miles per hour.

7. Let's pretend you are a scientist and want to do some manatee research work. Where would you find manatees in the winter?

- a. Resting on the beach
- b. Snoozing in a warm water area, like a spring or power plant outflow**
- c. Swimming 5–10 miles out at sea

Correct answer: b (Snoozing in a warm water area)—In the winter, you will usually find manatees at warm water refuge areas in Florida. Manatees can't tolerate temperatures less than 68°F, so they gather at warm water areas such as natural springs and power or paper plant outflows.

8. How long can manatees live?

- a. 20 years
- b. 60 years**
- c. 100 years

Correct answer: b (60 years)—Scientists believe that manatees can live 60 years or more. In fact, one manatee living in captivity is now over 50 years old! However, recent research shows that many manatees do not live to be more than 10 years old because of the threats they encounter in the wild. We need to reduce these threats in order to make sure that manatees are around for a long time.

9. Manatees are sometimes called by another name. Do you know what it is?

- a. Sea cow**
- b. Dugong
- c. Mermaid

Correct answer: a (sea cow)—Manatees are sometimes called sea cows. This is probably because, like the cows you see on a farm, manatees are herbivores or plant-eaters. Cowabunga!

10. Okay, open wide! Do you think manatees have teeth?

- a. Yes**
- b. No

Correct answer: a (Yes)—Manatees do have teeth, and they are called “marching molars” because they are constantly being replaced. New teeth form at the back of the jaw, wear down as they move forward, and then fall out. Scientists think this happens because manatees eat plants that are often mixed with sand—yuck!

11. Time to put on your thinking cap: we know manatees are mammals because they have

- a. Hair**
- b. Feathers
- c. Scales
- d. All of the above

Correct answer: a (Hair)—It's hard to see, but manatees do have sparse hair covering their body. In addition to having body hair, manatees are mammals because they breathe air, are warm-blooded, and nurse their young—just like humans!

12. Manatees have lots of body fat.

- a. True
- b. False**

Correct answer: b (False)—Although they look big, manatees don't have much body fat, and they can't take cold water temperatures for long periods of time. In fact, they can die when water temperatures drop below 68°F.

13. Sometimes kids can really chow down. But we think manatees have you beat. How much do you think a manatee can eat in one day?

- a. 5 pounds
- b. 100 pounds
- c. 500 pounds
- d. 1,000 pounds

Correct answer: c (100 pounds)—Manatees can eat about 10%–15% of their body weight in vegetation daily, so an average 1,000-pound manatee might eat 100–150 pounds of vegetation a day.

14. All right, let's get down to the bare bones—manatee bones, that is. The bones in a manatee's flipper are similar to a

- a. Human hand
- b. Dog's paw
- c. Fish's fin

Correct answer: a (human hand)—The bones in a manatee's flipper are similar to a human hand. The “finger” joints of the bones in their flippers help the manatees move through the water, bring food to their mouth, and hold objects.

15. Okay, let's get serious. Which of the following things can be harmful to manatees?

- a. Plastic bags
- b. Fishing line
- c. Fishing hooks
- d. All of the above

Correct answer: d (All of the above)—We know manatees are big, but trash or debris in the waterway can be dangerous to manatees, birds, and other wildlife. Manatees can drown in nets or die when they get infections from entanglement in discarded fishing line, hooks, or crab trap line. They can get sick or die when they accidentally swallow these items. Is there anything we could do to help protect manatees from these hazards?