

Lesson 8: How Do We Protect Sea Turtles?

Description:

Students will learn about laws that protect sea turtles, and ways that countries sometimes need to take special actions to help sea turtles survive.

Objectives:

By the conclusion of the activities, students will

- Be able to explain why international agreements are necessary to protect sea turtles.
- Have researched why the governments of Mexico and the U.S. needed to cooperate to develop a recovery plan for the Kemp's ridley sea turtle. They should be able to explain what is unique about the life history of this sea turtle species that would necessitate such an agreement.
- Be able to explain why special lights are used along sea turtle nesting beaches.
- Be able to explain why sea turtle nests may be marked by sea turtle patrols.

You will need:

- Copies of chapter 8, How Do We Protect Sea Turtles? for each student.
- Word wall words (pages 8-10 to 8-16)—printed, cut out and laminated (if desired).
- Copies of pages 8-4 to 8-5 and 8-7 to 8-8 for each student.
- Pencils.

Standards:

Florida Sunshine State Standards-

English Language Arts

- LAFS.5.RI.1.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
- LAFS.5.RI.1.2 Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.
- **LAFS.5.RI.2.4** Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.
- LAFS.5.W.1.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose. Provide logically ordered reasons that are supported by facts and details. Link opinion and reasons using words, phrases, and clauses (e.g., consequently, specifically).Provide a concluding statement or section related to the opinion presented.

Common Core Standards-

ELA/Literacy

• **RI.5.1** Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.



- **RI.5.2** Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text
- **RI.5.4** Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a *grade 5 topic or subject area*.
- **W.5.1.C** Link opinion and reasons using words, phrases, and clauses (e.g., *consequently*, *specifically*).

Vocabulary:

Atlantic Ocean: The ocean basin that separates the Americas from Europe and Africa.

Boat ramp: A slope that people back a trailer down to put a boat in the water.

Environment: The area in which something lives.

Exceptional: Unusual.

Fishing pier: A dock sticking out over the water that people use to fish from.

Germ: A microscopic living thing that sometimes causes disease.

Government: A group of people who make the rules that people live by.

GPS: Global Positioning System. A way for people to find where they are using satellites.

Gulf of Mexico: The body of salt water located between the southern United States and Central America.

Harass: To annoy someone, or an animal, over and over again.

International: Involving two or more countries.

Patrol: People who walk the beach to protect sea turtles and their nests.

Permit: A license. A written statement that allows something to happen.

- **Recovery plan:** A written document. It has steps that will help sea turtles. If the steps are followed, sea turtles will no longer be threatened.
- **Storm drain:** An opening along the ground that rainwater flows into. Storm drains are pipes that lead to a large body of water.

Tackle box: A box used to hold hooks, weights, and other items for fishing.

Treaties: Agreements between different countries.

Turtle excluder device: A special "door" used in shrimp nets to let turtles escape.

Procedure:

- 1. Add words for this lesson (pages 8-10 to 8-16) to your sea turtle word wall. Review these words with students (definitions are given in Vocabulary, above).
- 2. Have students read "How Do We Protect Sea Turtles?" (Chapter 8 in *One in a Thousand: Those Amazing Sea Turtles*).
- 3. Provide copies of the activity handouts (pages 8-4 to 8-5 and 8-7 to 8-8) to each student.

Activities:

Activity 1. **Understanding Sea Turtle Regulations** (pages 8-4 to 8-5). Students are provided three paragraphs from Chapter 8 "*How do we protect sea turtles*?" Following the reading there are a series of

Sea Turtle 5th *Grade Curriculum*



multiple choice and short answer questions that require critical analysis of the material to answer them correctly.

Activity 2. **Keeping Sea Turtle Nests Safe** (pages 8-7 to 8-8). Students are provided a short reading from Chapter 8 "*How do we protect sea turtles*?" Following the reading there are a series of multiple choice and short answer questions that require critical analysis of the material to answer them correctly.







Name:

Understanding Sea Turtle Regulations

Please read the following paragraphs from Chapter 8, "How do we protect sea turtles?"

The U.S. government has written sea turtle recovery plans. There are plans for each of the sea turtle species found in U.S. waters. These are the loggerhead, green, leatherback, Kemp's ridley, olive ridley and hawksbill sea turtles. The plans describe the threats to sea turtles, what actions are being taken to save them, and the goal for the species. A goal might say how many nesting females and hatchlings there should be. When the goals are reached, the U.S. can remove sea turtles from the endangered species list.

It would be easier to protect sea turtles if they stayed in one place. But sea turtles migrate over long distances (see chapters 1 and 9). One country might have laws to protect them. But the turtle could nest in a different country that does not have these laws. Sometimes countries do work together to protect sea turtles. For example, the U.S. and Mexican governments wrote and signed the recovery plan for the Kemp's ridley sea turtle together.

Many countries do have laws to protect sea turtles. There are also some regional treaties that make it illegal to catch or kill sea turtles. All of these rules were made to try and stop sea turtles from becoming extinct.

Using the information provided in the reading material, please answer the following questions:

- 1. One of the difficulties in protecting sea turtles is that they do not stay in one place. Why is this a problem? (Circle the correct answer)
 - a. It is not a problem. All countries work together to protect sea turtles.
 - b. Each country has its own set of laws. Sea turtles may nest in a country that does not protect the eggs.
 - c. All countries protect sea turtles the same way.



2. What are the names of the two countries that worked together to write a recovery plan for the Kemp's ridley sea turtle?

3. Based on what you know about the Kemp's ridley sea turtle, why would it be important for these two governments to work together to protect this species? (Hint: look up "arribada" in the section on the Kemp's ridley turtle in Chapter 2).



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Understanding Sea Turtle Regulations Answers

1. One of the difficulties in protecting sea turtles is that they do not stay in one place. Why is this a problem? 1. (Circle the correct answer)

- a. It is not a problem. All countries work together to protect sea turtles.
 b. Each country has its own set of laws. Sea turtles may nest in a country that does not protect the eggs.
 - c. All countries protect sea turtles the same way.

2. What are the names of the two countries who worked together to write a recovery plan for the Kemp's ridley sea turtle? **USA and Mexico**

3. Based on what you know about the Kemp's ridley sea turtle, why would it be important for these two governments to work together to protect this species? (Hint: look up "arribada" in the section on the Kemp's ridley turtle in Chapter 2).

Arribadas are described on page 16 of One in a Thousand: Those Amazing Sea Turtles and a

photograph of an arribada in Mexico is shown. Only the Kemp's and olive ridley sea turtles form

arribadas. All Kemp's ridley sea turtles nested at the same time (during daylight hours) on the same

beach in Mexico. This resulted in massive hunting of the species to the point of near-extinction prior

to regulatory protection. The Mexican and U.S. governments have worked very closely together to

protect this species. Without the active cooperation of the Mexican government there was no way to

protect nesting females, eggs and emerging hatchlings from hunting pressure on the one Mexican

beach that they all congregated on.



Name:

Keeping Sea Turtle Nests Safe

Please read the following selection from Chapter 8, "How do we protect sea turtles?"

People living or working on beaches where sea turtles lay nests need to use special outside lights. These lights do not confuse nesting or hatchling sea turtles. The special light bulbs are often orange or red in color. Hatchlings will not crawl towards them. Some beach lights have a special cover around them so the light does not shine straight down. That lets the light reflected off the ocean be the one that attracts the turtles.

People do many things to try and help protect sea turtle nests. In the U.S. you must have a permit to do anything with sea turtles or their nests. In some places, the nests are marked using sticks and colored tape. Volunteers or park rangers, called the sea turtle patrol, will look for turtle nests in the early morning. They mark each nest by putting four sticks into the sand around it. They are careful not to put the sticks into the nest itself. They tie colored tape around the top of the sticks. This lets people know that they should keep away from that area. Sometimes a sea turtle nest sign is attached to the sticks. The date that the nest was found is also marked. This lets biologists know when the babies should hatch. The sea turtle patrol will check on the nests each morning. Marking the nests can help make sure that people do not stick umbrella poles or fishing rod holders down into them.

Use the information presented in the reading (above) to answer the following questions:

1. The paragraphs (above) lists two main ways that people try to keep sea turtle nests and hatchlings safe. What are they?

A.	
В.	



2. Select the statement (below) that describes why people use special lights near the beach:

- a. The hatchlings crawl towards the special lights so they can find their way to the ocean.
- b. The special lights keep the hatchlings warm when they emerge from the nest.
- c. The special lights show the mother turtles where to lay their nests.
- d. The hatchlings do not confuse the special lights with light that is reflected off the ocean.

3. Why do some sea turtle patrols mark the location of turtle nests? Explain how marking the nests is helpful to sea turtle biologists. How is it helpful to the turtle hatchlings?

Sea Turtle 5th Grade Curriculum



Keeping Sea Turtle Nests Safe Answers

1. The paragraphs (above) lists two main ways that people try to keep sea turtle nests and hatchlings safe. What are they?

Α.	They use special lights at the beach
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B.	They mark the location of turtle nests with sticks and colored tape

2. Select the statement (below) that describes why people use special lights near the beach:

- a. The hatchlings crawl towards the special lights so they can find their way to the ocean.
- b. The special lights keep the hatchlings warm when they emerge from the nest.
- c. The special lights show the mother turtles where to lay their nests.

d. The hatchlings do not confuse the special lights with light that is reflected off the ocean.

3. Why do some sea turtle patrols mark the location of turtle nests? Explain how marking the nests is helpful to sea turtle biologists. How is it helpful to the turtle hatchlings?

Some sea turtle patrols mark the location of turtle nests so that people will keep away

from the nests. (Other answers could include that they mark the location so that

biologists can monitor the nests, or check for hatchlings). Sea turtle biologists can

check on the nests when the babies are due to hatch. If people know where the nests

are, they will not stick their umbrellas or fishing rod holders into them.

Atlantic Ocean Boat ramp Treaties

Environment

Exceptional

Fishing pier

Germ Government GPS

Gulf of Mexico Harass International

Patrol Permit **Recovery plan**

Storm drain Tackle box

Turtle excluder device