Lesson 11: Introduction to Right Whales

Objectives: Students will learn about North Atlantic right whale life histories. Students will read an informational publication about right whales and will use information from the publication to complete worksheets.

What you will need:

- Copies of the reading material (handout) for each student (page 11-2 to 11-6).
- Copies of the worksheet for each student (page 11-7 to 11-10).
- Suggested: copies of humpback whale fact sheet (from Lesson 3).

Standards: CCSS.ELA-Literacy.RF.4.4

Strategy:

1. Remind the students that they have been learning about different kinds of cetaceans. Now they are going to spend some time learning more about one particular cetacean, the North Atlantic right whale.
2. Provide each student with a copy of the reading material (handout).
3. Provide each student with a copy of the worksheet. Ask them to complete the worksheet as they read through the article on right whales. You will probably want to have humpback whale fact sheets or other reference materials available to help with comparison between humpbacks and right whales.
**Introducing …**

**the Right Whale!**

**Why do we call these whales the “Right Whales”?**

More than 1000 years ago, humans did not get oil from oil wells. Instead, oil was made from animal products. Whales, because of their massive size and thick layers of blubber, were an excellent source of oil.

The “right whale” was named because it was the right whale to hunt. Right whales are found close to shore. They swim very slowly, usually at the surface. When the whales were killed, the body would float. This made it easier for the whalers to harvest the animal.

By 1935 there were very few North Atlantic right whales left. People could not make money hunting them any more. Right whales became protected. The Marine Mammal Protection Act was created in 1972. This prevents commercial hunting of all types of whales in United States waters. Today, native Alaskan people are allowed to hunt a few bowhead whales each year. No other whaling is allowed in US waters.

**Is there only one “Right Whale”?**

There are three different populations of right whales. The one seen in Florida waters is the North Atlantic right whale. That is the one we will talk about the most. There are about 450 whales in the North Atlantic population.

There is also a North Pacific Right Whale. These whales are found off the coast of Japan. There are very, very few North Pacific Right Whales left.
The Southern Right Whale is found off the coast of South America, Africa and Australia. This group of right whales is doing very well and there are several thousand animals in this population.

**Fun Facts about Right Whales**

Right whales are baleen whales. They can grow to 55 feet in length and weigh 140,000 pounds.

Right whales are “skim feeders”. They swim at the surface with their mouth open to catch plankton.

In Florida, female right whales visit the ocean area between Jacksonville and Daytona Beach in the winter. This is where the calves are born. In March or April they begin to migrate north and spend the summer feeding in waters near Massachusetts and Canada.

This activity is available online at http://stjohns.ifas.ufl.edu/sea/rightwhalecurriculum.html
Right whales have “callosities” on their heads. These are patches of skin that are covered with little white bugs called “cyamids”. The cyamids are also sometimes called whale lice. They do not seem to bother the right whales. The callosities on each whale form a unique pattern. Callosities are used like a fingerprint to identify individual right whales.

**Callosities** (circled spots) are used to identify individual animals. The callosity pattern is like the whale’s fingerprint!

**Cyamids** are tiny creatures sometimes called “whale lice”. Their white color makes the callosities visible to scientists who identify the whales.

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Right whales in Florida

Right whales come to Florida every winter. Pregnant cows begin arriving in December. The calves are born over the next few months. The right whales usually head north to their summer feeding grounds in March or April.

In some years only one or two new calves join the herd. In other years there may be as many as 20-30 new calves. Currently, there are only about 450 North Atlantic right whales.

Summer Feeding

Right whales feed off the coast of New England and off southeastern Canada, in a place called the Bay of Fundy. This is a very special place with water that is full of tiny plankton. Plankton is the main food for hungry right whales.

Right whales catch plankton by SKIMMING the surface of the water with their mouth open. They trap the plankton in their baleen.

Scientists watch the whales all summer while they are feeding in the Bay of Fundy. They photograph as many whales as possible. They compare their photographs to photographs of known right whales. This allows them to identify the whales they have seen. Researchers study the whales and check on the new calves.

This activity is available online at http://stjohns.ifas.ufl.edu/sea/rightwhalecurriculum.html
The Bay of Fundy is a very large area. It can be difficult for scientists to find the whales. One method is using spotters who look for whales from airplanes. This is expensive and can be dangerous.

Biologists often collect data from small planes. They take photographs to count whales when they surface for air.

**Fun Fact: Whale-Tracking Dogs!**

Another way scientists find the whales is by using dogs. Whale-tracking dogs are trained to smell whale poop. (Yes, you read that right...whale poop!). The dogs sit on the front of the scientist’s boat. Each dog wears its own life jacket! The dogs show the scientists where the whales are. Do you think your dog could be trained to track a whale?

This activity is available online at [http://stjohns.ifas.ufl.edu/sea/rightwhalecurriculum.html](http://stjohns.ifas.ufl.edu/sea/rightwhalecurriculum.html)
During the winter very large baleen whales, called RIGHT whales, visit the Northeast Florida coast. These whales arrive in December and leave in March or April.

1. Why are these animals called “Right” Whales?

2. Why do they visit Florida waters each winter?
3. Fill in the parts of this whale

4. Look carefully at the right whale above. Is this whale a baleen whale or an odontocete?

5. Right whales feed by swimming at the surface with their mouth open.

   This is called _ K _ M M _ G. (Fill in the blanks.)
6. Let’s compare right whales and humpback whales. Here is a list of terms that go with right whales, humpback whales or both. Write each term in the proper place in the Venn diagram.

<table>
<thead>
<tr>
<th>Right Whales</th>
<th>Humpback Whales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skim Feeder</td>
<td>Short triangular flippers</td>
</tr>
<tr>
<td>Gulper</td>
<td>Callosities</td>
</tr>
<tr>
<td>Baleen</td>
<td>Flukes</td>
</tr>
<tr>
<td>Long white flippers</td>
<td>Sings</td>
</tr>
</tbody>
</table>

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7. Right whales eat by skimming the surface of the ocean. Which of the following do you think they eat? (circle your answer).

- Sharks
- Fish
- Plankton
The Right Whale—student worksheet ANSWER KEY

Name: _________________

During the winter very large baleen whales, called RIGHT whales, visit the Northeast Florida coast. These whales arrive in December and leave in March or April.

1. Why are these animals called “Right” Whales?
   
   They are slow swimmers. They are found close to shore. They floated when killed. All of these made them the “right” whale to hunt.

2. Why do they visit Florida waters each winter?
   
   To have their calves/babies

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3. Fill in the parts of this whale

<table>
<thead>
<tr>
<th>Tail fluke</th>
<th>Eye</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flipper</td>
<td>Baleen</td>
</tr>
</tbody>
</table>

4. Look carefully at the right whale above. Is this whale a baleen whale or an odontocete?

*Baleen whale (or mysticete)*

5. Right whales feed by swimming at the surface with their mouth open.

This is called *S K I M M I N G*.* (Fill in the blanks.)

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- Gulper
- Baleen
- Long white flippers
- Short triangular flippers
- Callosities
- Flukes
- Sings

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Sharks

Fish

Plankton