

# Blue Impact: Sea Turtles

## Answer Key

### DIRECTIONS

Answer the following questions while watching the New England Aquarium's **Blue Impact Sea Turtles: A Temperature Tale** video. It is a good idea to read all the questions before you start the video. You may also need to pause or replay sections to help you answer the questions.

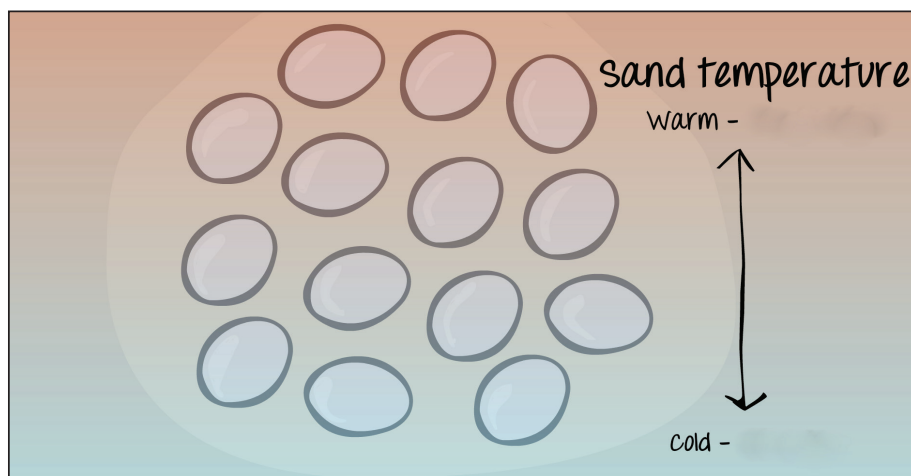
### QUESTIONS

1. This video shows the many species of sea turtles that lay their eggs in the sandy shores of the \_\_\_\_\_ **b.** \_\_\_\_\_ .

- a. Mediterranean Sea
- b. Caribbean Sea**
- c. Pacific Ocean
- d. Arctic Ocean

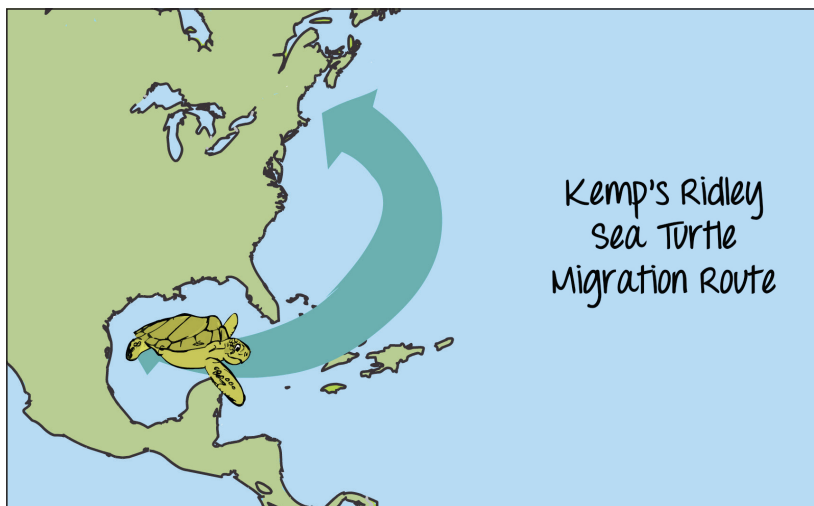
2. Fill in the blanks with the either **male** or **female**.

Warm sand leads to \_\_\_\_\_ **female** \_\_\_\_\_ sea turtles and cool sand leads to \_\_\_\_\_ **male** \_\_\_\_\_ sea turtles.



**As average temperatures rise, the sand on the bottom of the pit gets warmer which means more and more female turtles hatch.**

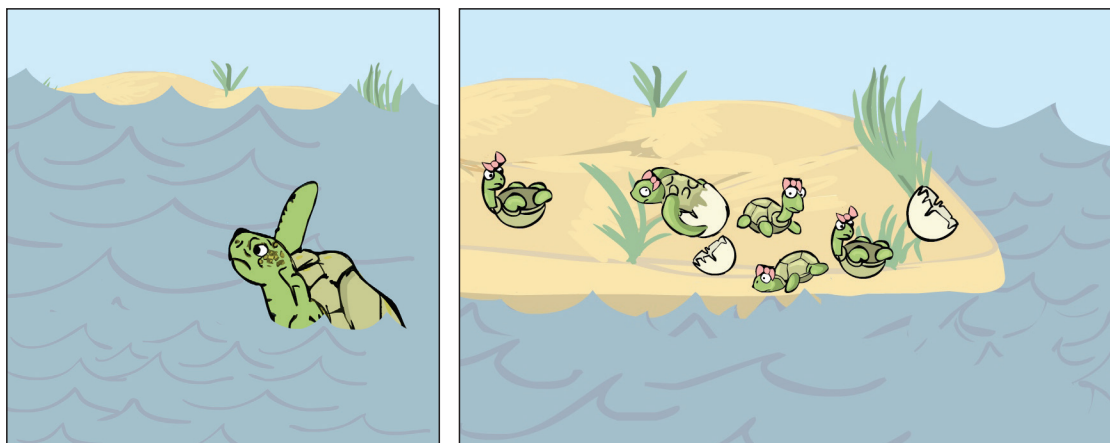
3. Describe the Kemp's ridley sea turtle migration route. Include starting points, feeding grounds, cardinal directions (North, South, East and West), distances, landmarks and locations.



*Answers will vary. Use the image and notes below to compare with students' answers.*

- **starting points**–Caribbean Sea/Gulf of Mexico
- **feeding grounds**–North Atlantic near Massachusetts and Cape Cod
- **cardinal directions (North, South, East and West)**–East from Mexico and then once they are in the Atlantic they swim North towards Massachusetts, after feeding they swim
- **South past Florida and West to lay their eggs**
- **distances**–round trip is several thousand miles
- **landmarks and locations**–Mexico, Florida, Caribbean, Atlantic Ocean, Massachusetts, Cape Cod

4. Use these images from the video to explain why rising ocean waters are threatening sea turtles.



**More CO<sub>2</sub> in the atmosphere traps more heat, and makes the ocean hotter and sea levels rise. An increase in sea level means less beach area/nesting sites for the sea turtles. Therefore some turtles make the long journey home only to find that their birth beach is no longer there.**

## CHALLENGE QUESTIONS

Answer the following questions on a separate piece of paper.

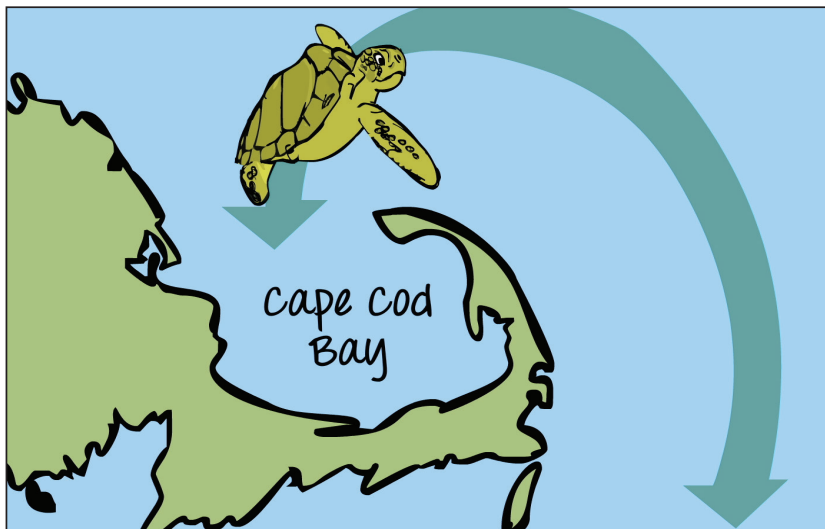
1. Why do sea turtles migrate?

Visit [www.conserveturtles.org](http://www.conserveturtles.org) and search for information on sea turtle behavior.

*Sea turtles typically spend their juvenile years eating and growing in nearshore habitats. Once they reach adulthood and sexual maturity, they migrate to a new feeding ground. It is in this primary feeding area where adult turtles probably remain throughout their lives, except during breeding season. When it is their time to mate and nest, both males and females leave their feeding grounds and migrate to the nesting beach. This periodic migration will continue throughout their lives. —Sea Turtle Conservancy*

*Colder ocean waters hold more oxygen than warmer waters. The colder water supports more photosynthetic phytoplankton, which then supports more ocean life. Animals that migrate to colder waters such as sea turtles, whales and even some fish do so for the rich food sources.*

2. Use the image pictured below and information from the video to explain why sea turtles get stranded in Cape Cod Bay in Massachusetts.



*Many turtles choose the bay route, because the water is warm and full of food for them. However, in the late fall and winter months there can be a sudden cold snap and this bay water can drop down below 50 degrees. The turtles are then stunned; that is, they are too cold to swim any more. Every year these cold-stunned turtles wash up on the shores of beaches along Cape Cod, often unconscious and battered.*

3. What are volunteers doing to help the stranded sea turtles in the video?

*Rescue volunteers who are authorized to handle the stranded marine animals collect the turtles so they can be treated for the cold stun. For example, they take them to the New England Aquarium hospital for treatment. The team uses ventilators, x-rays, medicine and other therapies to rehabilitate the turtles so they can return to the sea.*