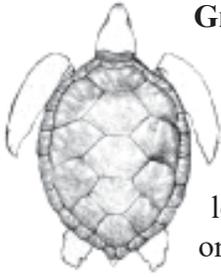
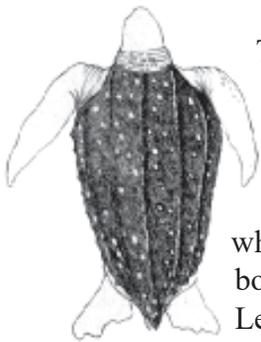
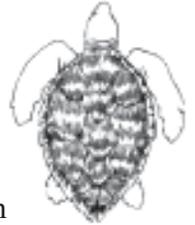


Information About Sea Turtles:



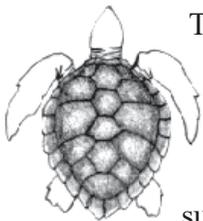
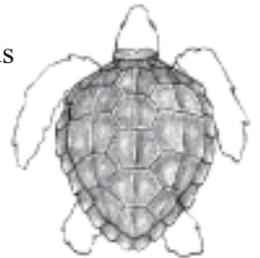
Green turtles (*Chelonia mydas*) are an endangered species around the world and are easily distinguished from other sea turtles because they have a single pair of scales in front of their eyes rather than two pairs as the other sea turtles have. The green turtle is the largest of the hard-shelled sea turtles. Female green turtles average more than three feet in carapace length, and average about 300 pounds in weight. The largest green turtle ever found was five feet in length and 871 pounds. As adults, green turtles mostly eat sea grass and algae, making it the only sea turtle that is strictly herbivorous.

Hawksbills (*Eretmochelys imbricata*) are endangered in large part because people kill them to get their beautiful shells, which are used to make jewelry and other products. Although they are found in U.S. waters, they rarely nest in North America. The hawksbill is one of the smaller sea turtles, measuring up to three feet in carapace length and weighing 100 to 150 pounds. The hawksbill has a narrow head and jaws shaped like a beak. This allows the hawksbill to get food from crevices in coral reefs. They eat sponges, anemones, squid and shrimp. Although they nest on beaches throughout the Caribbean, they are no longer found anywhere in large numbers.



The **leatherback** (*Dermochelys coriacea*) is also endangered. It grows the largest, dives the deepest, and travels the farthest of all sea turtles. Mature leatherbacks typically reach about four to eight feet in length and weigh from 650 to 1,300 pounds. The largest leatherback ever recorded was almost 10 feet from the tip of its beak to the tip of its tail! The leatherback is the only sea turtle that lacks a hard shell. It is named for its large, elongate shell which is composed of a layer of thin, tough, rubbery skin, strengthened by thousands of tiny bone plates. The body of a leatherback is barrel shaped, tapering at the rear to a blunt point. Leatherbacks have delicate, scissor-like jaws. Their jaws would be damaged by anything other than a diet of soft-bodied animals, so they feed almost exclusively on jellyfish.

The **loggerhead** (*Caretta caretta*) gets its name from its exceptionally large head. Adult loggerheads weigh up to 350 pounds and have a reddish-brown carapace (upper shell) and a dull brown to yellow plastron (lower shell). Fully grown, a loggerhead's carapace is typically two and a half to three and a half feet. Loggerheads are primarily carnivorous and feed mostly on shellfish that live on the bottom of the ocean. They eat horseshoe crabs, clams, mussels, and other invertebrates. Their powerful jaw muscles help them to easily crush the shellfish.



The **Kemp's ridley** (*Lepidochelys kempii*) is named after Richard Kemp, who helped discover and study the species. Kemp's ridleys are the smallest (about 2 feet long and less than 100 pounds) and most endangered of all sea turtles. They nest in mass synchronized nestings called arribadas (Spanish for "arrival"). Kemp's ridleys feed mostly on crabs, clams, mussels, and shrimp. They also like to eat fish, sea urchins, squid and jellyfish. The greatest threat to their survival continues to be incidental capture in shrimp trawler nets.

Information About You:

MY NAME IS: _____ I AM _____ YEARS OLD

MY HOBBIES ARE: _____

MY FAVORITE FOOD IS: _____

MY FAVORITE ANIMAL IS: _____

Glossary of Sea Turtle Related Terms:

Accretion - the addition of sand to a beach by a gradual, natural process.

Arribada - Spanish for "arrival," used to refer to the mass, synchronized emergence of nesting sea turtles.

Artificial Lighting - Light created by human-made sources, such as lamp posts and porch lights.

Beach Renourishment - the addition of sand to a beach by humans to replace sand lost through erosion.

Body Pit - the upper part of a turtle nest where the turtle removes the surface layers of sand before digging the egg chamber.

Brackish - somewhat salty water usually found in marshes, lagoons and estuaries along the coast.

Carapace - the dorsal or upper portion of a turtle's shell.

Carnivore - an organism that eats only other animals.

Caruncle - a temporary, sharp egg-tooth on hatchlings used to tear open the egg shell.

Clutch - a nest of eggs.

Coastal Armoring - anything built along a beach to protect structures from beach erosion.

Community - a group of animal and plant species that live in the same area and interact with each other through food chains and other interrelationships.

Convention on International Trade in Endangered Species (CITES) - agreement to control the international trade of endangered and threatened species.

Ecosystem - a system made up of biological communities and the physical and chemical environment.

Egg Chamber (Cavity) - the part of a turtle nest where the eggs incubate.

Endangered Species - an organism that is in danger of becoming extinct.

Endangered Species Act (ESA) - a law that protects endangered and threatened species in the United States.

Erosion - the removal of sand from a beach by either a gradual process or during a storm event.

Estuary - an area where fresh water and salt water mix with a strong tidal flow and little standing water.

Exotic Species - species that are introduced into an area where they are not naturally occurring.

Extinct - when the last living individual of a species dies, causing the species to no longer exist.

False Crawl - term used to describe when a turtle crawls onto the beach but does not nest.

Fibropapillomas - a disease that causes cauliflower-like tumors to grow on sea turtles and other animals.

Habitat - a place where a plant or animal naturally lives.

Herbivore - an organism that eats only plants.

Incubate - process during which eggs develop into hatchlings.

Lagoon - an area where fresh water and salt water mix with a weak tidal flow and standing water.

Latitude - distance in degrees north or south of the equator.

Longitude - distance in degrees east or west on the Earth's axis.

Magnetic Field - a region in which there is a magnetic force, found in the materials of the earth's crust.

Migration - the act of moving from one place to another.

Natal Beach - the beach where a sea turtle was born.

Nest - the structure made for laying and incubating eggs.

Plastron - the lower or ventral portion of a turtle's shell.

Poach - to hunt illegally.

Predator - an organism that lives by capturing and feeding on other animals or their eggs

Pristine - an area that is untouched or unspoiled.

Satellite Telemetry - technology that uses a radio transmitter to transmits signal to satellites orbiting the Earth.

Scutes - the hard scales covering a turtle's shell.

Storm Event - a disturbance, usually having strong winds, rain, thunder and lightning.

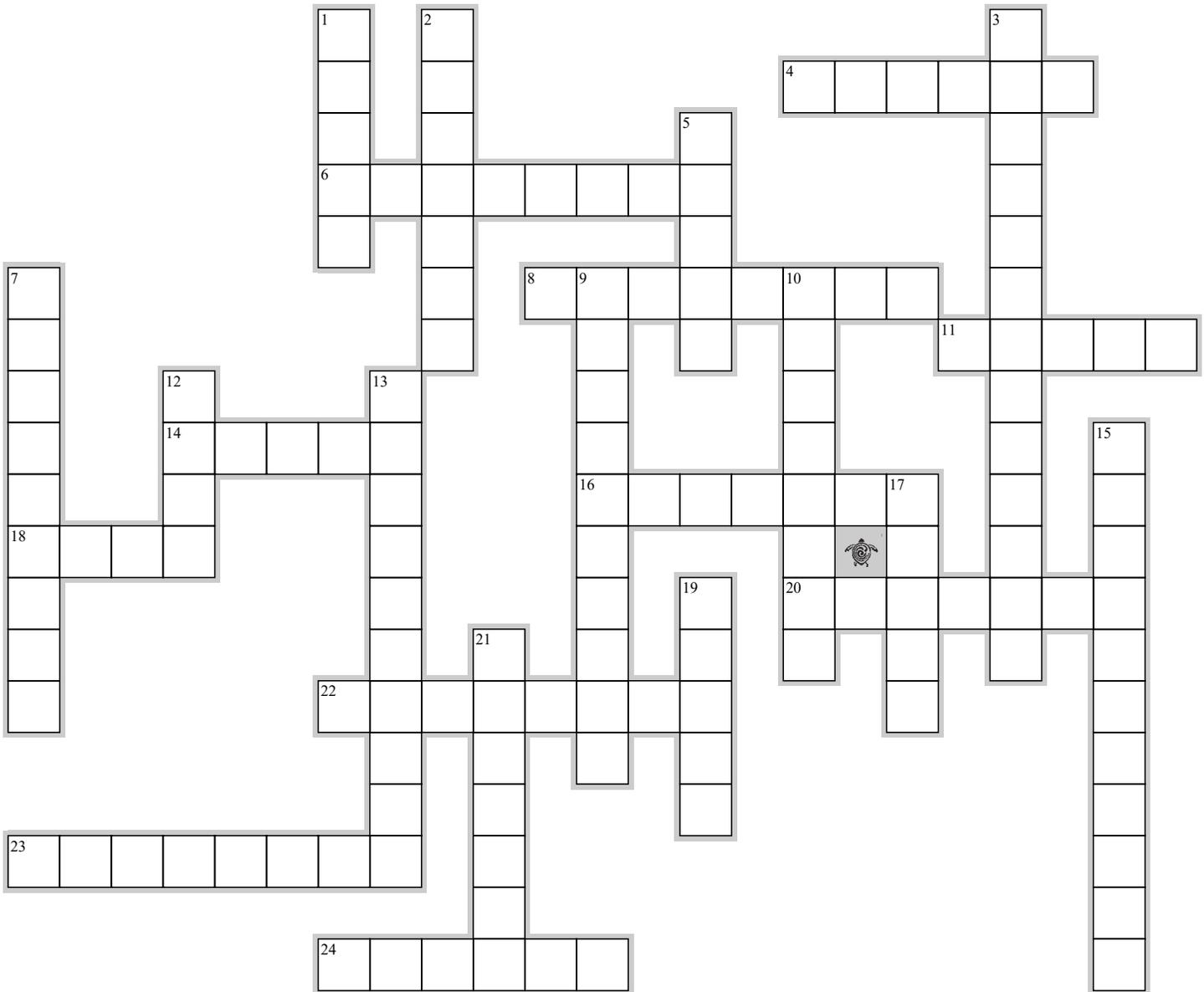
Threatened Species - an organism that may become endangered.

Turtle Excluder Devices (TEDs) - a device attached to a shrimp net to allow sea turtles and other large organisms to escape from the net while allowing shrimp to be caught.

Where's the Turtle?

Can you find the turtle? Look for the turtle logo somewhere on each page. This is what it looks like -->

Use your answers to the clues about sea turtles and their habitats to fill in the crossword. Need help? Take a look at the *Glossary of Terms* at the beginning of the book! The solution is on the inside back cover of the book.



Clues to Crossword

ACROSS

4. The hard scales covering a turtle's shell.
6. Spanish for "arrival," used to refer to the mass, synchronized emergence of nesting sea turtles.
8. Underside of a sea turtle's shell.
11. Artificial _____ may cause hatchling sea turtles to become disorientated after hatching out of a nest.
14. Turtle that is named for the color of the fat underneath its shell.
16. This is the removal of sand from a beach by either a gradual process or during a storm event.
18. Plastic _____ are often mistakenly eaten by sea turtles, often causing them to die.
20. When the last living individual of a species dies, causing the species to no longer exist, it is called _____.
22. The upper part, or back, of a sea turtle's shell.
23. An organism that lives by feeding on other animals.
24. A nest of eggs

DOWN

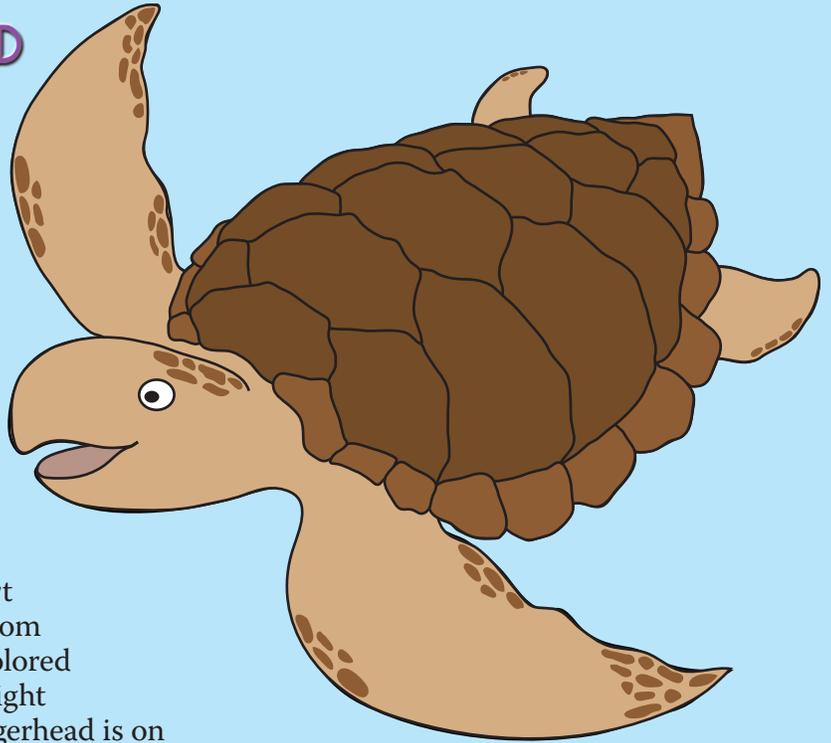
1. Sea turtles are one of the few types of reptiles found living in this habitat.
2. Sea turtles _____ hundred or even thousands of miles to get from their feeding grounds to their nesting beaches.
3. Beach _____ is the addition of sand to a beach by humans to replace sand lost through erosion.
5. When a female turtle crawls out of the ocean onto a beach, but for some reason does not nest, it is called a _____ crawl.
7. Sea turtle that gets its name because its mouth is shaped like a beak.
9. This species of sea turtle gets its name from its very large head.
10. Sea turtles are air breathing _____.
12. In many countries, people still eat sea turtle meat and _____.
13. Sea turtles spend over 90% of their lives _____.
15. The largest species of sea turtle.
17. The beach where female sea turtles were born and return to lay their eggs is called a _____ beach.
19. The primary reason hawksbill sea turtles are killed.
21. A place where a plant or animal lives.

LOTTIE LOGGERHEAD

Scientific name: *Caretta caretta*

Hi! My name is Lottie and I'm a female loggerhead sea turtle.

Loggerheads, like me, are endangered and can be found throughout the world in subtropical and tropical ocean waters. That means we don't travel too far south or north of the equator because we like to stick to warmer waters. We consider ourselves to be extremely beautiful animals. Our shells are composed of two parts, a carapace (the top part of the shell) and a plastron (the bottom part of the shell). Our carapace is colored reddish-brown and our plastron is light yellow. The carapace of an adult loggerhead is on average 1 meter (3 feet) long. We loggerheads range in weight from 77 to 227 kilograms (170 to 500 pounds), but the average is around 113 kilograms (250 pounds). That means we weigh about the same as an adult female tiger. Despite our large size, we're actually not the largest marine turtle! Leatherback sea turtles have that honor, weighing as much as 900 kilograms (2,000 pounds).



Fun Fact:

We get the name Loggerhead because of our large heads. Some thought our heads were as big as logs!

We loggerheads are the most common species of sea turtle in the southeastern United States. In fact, the east coast of Florida and the coast of Oman (in the Middle East) are the two most important places for us to nest on the planet. Female loggerheads reach maturity between the ages of 17 and 35. After becoming moms, female loggerheads will mate and nest every 2 to 3 years. The nesting season in the southeastern United States starts in April and ends in September each year. During this time, we females will crawl up onto the beach, clear away the dry sand and then dig an egg chamber with our rear flippers. This is really hard work for us since we are designed to swim, not crawl. Hence, you can hear us grunting a lot during the process. We will then lay between 50 and 200 eggs the size of golf balls and cover the eggs back up with sand. The whole process takes on average 2 hours to complete. Phew! After 2 months of incubating, my hatchlings will dig their way up through the sand and make their way to the ocean and the life-cycle of my species will continue.

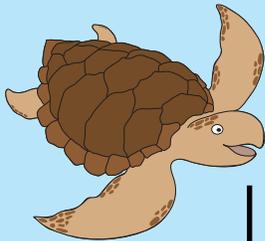
Fun Fact:

When resting, we can stay under water for 2 hours!

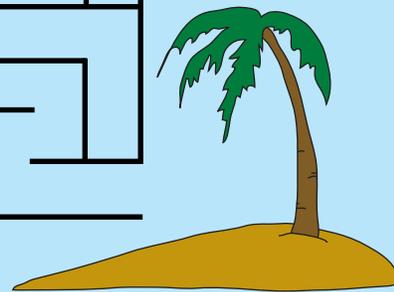
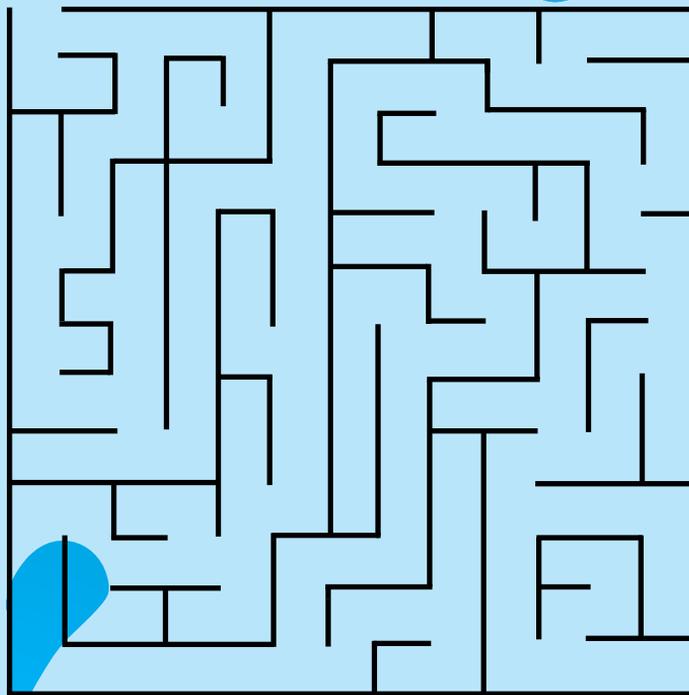
As a female loggerhead, it is instinctive for me to always return to the same area to nest each time. In fact, I really like to return to the same exact beach year after year. In the Gulf of Mexico, my friends and I nest on beaches on offshore, sandy barrier islands. Unfortunately, these islands are only a few centimeters to meters above sea level. If the sea level rises too much, these barrier islands will be submerged permanently and we will not be able to use them for nesting. What is a female loggerhead like me to do when my nesting beach no longer exists?

Fun Fact:

Whether a Loggerhead is a boy or girl depends on the temperature of the egg while it's developing. If the egg is 32°C (90°F) or hotter, it's a girl! If the egg is 28°C (82°F) or cooler, it's a boy! Any temperature in between will result in a mixture of boy and girl turtles.



Help Lottie find her way to the perfect nesting spot.



Fun Fact:

Loggerheads are carnivores. This means we mainly eat other animals. Our favorite foods are jellyfish and crustaceans.



Solution to Crossword

