Loggerhead

The loggerhead gets its name from its enormous head that is very oversized compared to the rest of his body. The loggerhead uses this oversized head to crush the shells of clams, snails, and crabs. Loggerheads will also eat sea grasses. This turtle is very well adapted to any environment. The loggerhead is the third largest sea turtle at 300 pounds. This turtle is very wide spread, yet declining in numbers worldwide. They are the least endangered and seem to be everywhere from the oceans around Australia and off the coast of California to the Gulf of Mexico. They can be found in inland bays and as far as 500 miles off shore.

This loggerhead is just returning to the sea after nesting. Color the turtle and draw in the background.
Green Sea Turtles

When traders first began traveling, they found that green sea turtles had especially tasty meat. Early sailors would capture green turtles, haul them into their ships, and turn them over. The sea turtle would stay alive a long time, and the sailors would have a fresh supply of meat. The green turtle lives in coastal waters and feeds on the sea grasses. The green is about 3 feet in length and weighs about 350 pounds. They have a heart shaped carapace and are the second largest sea turtle. The largest concentration of green turtles is off the coast of Australia. The green gets its name from the color of its fat, because of its strict dieting habit, eating only sea grasses. This makes the fat an olive green color. One of the odd characteristics of the green turtle is its use of an underwater sleeping shelter that it often returns to each night. The greens have picked up the name “sun bather” because they will sit on the ocean’s surface, just basking in the sun.
Turtle truth... hatchlings will be boys if the eggs have a cooler temperature surrounding them... and hatchlings will be girls if there are warmer temperatures in the nest...

Hawksbill

The hawksbill is often sought after by poachers because of its beautiful carapace, or top shell. The carapace itself is yellow and brown. The scales overlap like roof shingles to make a very ornate pattern. This sea turtle measures in a little less than 3 feet long and usually weighs around 100 pounds at adulthood. Their diet consists of poisonous sponges that scientists have not figured out how hawksbills eat without any ill side effects. When a hawksbill chooses a nesting site, it tends to select a very isolated spot where there are lots of roots and shrubs. They do this to make it more difficult for predators to get their nest.

Color
B = brown
G = gold
Y = yellow
T = tan
The leatherback is the largest in the sea turtle family, growing to be almost eight feet long and weighing 1000 pounds. This sea turtle’s overall color is black, and it is the only sea turtle that does not have a hard carapace. The leatherback is a great traveler going for thousands of miles, and a deep diver. A female may nest on the beaches in South America, and then follow the Gulf Stream all the way up into Nova Scotia, Canada. Some leatherbacks do nest in Florida on the east coast. The leatherback’s diet consists of jellyfish, and one of its favorites is the poisonous Portuguese Man-o-war.

Turtle truth... sea turtles may live to be 100 years old. That makes them among the oldest living vertebrate animals!
Kemp's Ridley

The Kemp's ridley is the smallest sea turtle, at about 28 inches in length. The hatchlings are only about 2 inches and dark in color. When they become adults, their color changes to an olive green. The Kemp's ridley has only been identified as its own species since 1963. Unlike most other turtles, the Kemp's ridley nesting event takes place in a large group, called an "arríbada", mostly in Mexico. The Kemp's ridley feeds on small crustaceans. The Kemp's ridley is on the verge of extinction and is the most endangered of the sea turtles.

Here's a Kemp's ridley. All the females nest at the same time. How many Kemp's ridley turtles can you squeeze on this nesting beach?
Draw Your Own Sea Turtle

1. Make an oval with a flat top.
2. Add a head. If you are making a loggerhead sea turtle, make the head BIG, like a log! If you are making a green sea turtle, the head will be smaller.
3. Add eyes.
4. Front flippers are next. Sea turtles cannot pull their legs and head into their shells, so there will be more forelimb (flipper) showing.
5. Next come the "scutes." Scutes are hard scales on the sea turtle's shell. Start with three hexagons (hexagons are six sided shapes)
6. Add line segments from your hexagons.
7. If you've done this part right, your turtle will have thirteen scutes. All sea turtles have scutes, except leatherbacks.
8. If you want to get fancy, you can add a band of smaller scales around the thirteen scutes. Your sea turtle will have "leathery" looking skin.
9. If you want a boy turtle, add a big tail, but if yours is a girl, the tail will just poke out a bit from under the shell.

Turtle truth... Some females may nest many times in a season, laying hundreds and hundreds of eggs.
"Turtle truth... sea turtles migrate thousands of miles in a year!"

WORDSEARCH

See if you can find the words listed below in the WORDSEARCH to the right. The words go up, down, across, diagonally, or backwards. Once you find all the words, think about what each has to do with sea turtles and efforts to protect them. Use your glossary to help you!

CRABS  ENDANGERED  NEST  TURTLE EXCLUDER  BEACH  LIGHTS  HATCHLINGS  SATELLITE  LEATHERBACK  PLASTIC  POLLUTION  HABITAT  SEA WALL  SHRIMP NETS  MIGRATE  LOGGERHEAD

Sea Turtle Survival League
The Life Cycle of the Sea Turtle

Hatchlings leaving their eggs.

Draw and color some other organisms.
See if you can help the mother turtle and her hatchlings find their way to a suitable habitat. The hatchlings must make it to a healthy ocean habitat with plenty of food. The adult female turtle is trying to find a dark quiet nesting beach to build her nest. Beware of all the threats that might keep them from reaching their destinations.

Sea Turtle Survival League
Educator's Guide

Turtle truth...Ancestors of today's sea turtles lived in the sea when the dinosaurs
The Sea Turtle’s Body

The sea turtle has been around since prehistoric times and really has not changed much. The turtle’s most distinctive feature is its shell. The turtle’s shell is attached to the turtle by the backbone vertebrae, at the top of the shell. The shell grows with the turtle and never cramps the turtle. The top of the shell is called the carapace and the bottom is known as the plastron. On the carapace, you see the scutes which are woven, like roof shingles. Unlike the fresh water turtles, sea turtles cannot pull their head or limbs into their shells because of tendons attaching them. The sea turtle has limbs that are flippers and the front flippers are much stronger than the back.

Sea turtles have evolved to cope with being in the salt water all the time. They are able to cry out the salt that they consume, and this helps prevent dehydration.

Unscramble...to make words related to the sea turtle’s body...

leshl
apecacar
slapnotfr
tessuc
blism
last
sliepeprf
cobbeakn
dahe
+reaveerb
stonedn
tradhoideyn
Can you label the turtle's anatomy?

The back of a turtle is covered with bony plates called scutes, which form the CARAPACE.

The bones in the tail are called the TAIL VERTEBRAE.

The front flipper is called the FORE LIMB.

The bones in the neck are called the NECK VERTEBRAE.

The back flipper is called the HIND LIMB.

The soft parts of the head are protected by the SKULL.

The underside of a turtle is called the PLASTRON.

The bones that run along the back are the RIBS and VERTEBRAE.
Dangers in the water

One of the biggest dangers affecting sea turtles is trash in the water. Many small turtles can get their heads caught in the plastic rings that held six packs of soda. Among other dangers, the largest turtle, the leatherback, diets on jellyfish. When the leatherback sees a plastic bag in the water, it might go after it thinking it’s found a jellyfish. The bag will be trapped in its throat or digestive system. Fishing line and fishing hooks are very dangerous because the sea turtles can ingest them.

How long does it take for each bit of trash to disappear? Match the item to the time.

- Aluminum can: 600 years
- Plastic six-pack ring: 400 years
- Disposable Diaper: 50 years
- Foam cup: No one knows!
- Microfilament fishing line: 6 weeks
- Apple Core: 2 months
- Glass bottles: 200 years
- Newspaper: 450 years

Another danger in the water is long-line fishing and big trolling nets. Discarded lines from crab pots can become wrapped around a flipper, causing great damage and death. Now fishing nets have TEDs - “turtle excluder devices” - that allow the turtle to escape from a shrimp boat net, and still allow fishermen to keep their catch. Many people are not using TEDs yet, and some think they may be too small for larger sea turtles, but they are saving many turtles all over the world.
What kids can do to help

The most important thing kids can do to help sea turtles is to be aware and knowledgeable and to share that knowledge with other people. A big thing young people can do is to organize beach cleanups. If you cannot do that just make sure you are not adding to the problem. When you're out in the boat or on the beach, make sure you have a place to put your trash and used fishing line. If you are all really active, you want other people to be as involved as you are to make a difference. Start programs where you can go to different schools and libraries and try to get people as interested as you. The turtle population is diminishing, and it is mostly a result of not understanding the consequences of our actions. People will listen if you give them the information. Most people aren't trying to hurt the sea turtles. They just don't know any better. If you see a turtle on the beach, you should not touch it or get near it. If the turtle is nesting, then just stay back and leave her alone. If the turtle seems to be in distress, then locate a local environmental group or a beach permit holder who has government permission to work with turtles.

Turtle eggs! Write something you can do (inside each egg) to help sea turtles.
No Place to Nest

When you are down on the beach, now what do you see? Large apartment buildings, houses, and hotels are taking up most of our beaches and leaving only a small piece of the beach left. Then this small strip is covered in beach furniture. Where the sea turtles lay their eggs, there will be thousands of people walking over the same spots. Also illuminating from these houses and apartments are very bright lights attracting hatchlings away from the water. Once there were miles and miles of beach for sea turtles to lay their eggs without any man made troubles - now there is nearly nowhere to nest.

Circle everything that should be removed from the beach at sunset...
Use this page to draw turtles, keep a journal of your sea turtle encounters, or make a list of things you can do to help our coastal environment.

"Turle truth... a sea turtle eggshell is full of tiny holes that you cannot see. Oxygen can pass through these holes to the young inside, even when they are buried in the sand!"
**Arribada** - Spanish for Arrival, used to refer to a mass, synchronized nesting of sea turtles.

**Carapace** - The top portion of the turtle shell.

**Crustaceans** - Lobsters, shrimp, and crabs that have hard shells, jointed legs, and live underwater.

**Endangered** - When a species is in danger of becoming extinct.

**Estuary** - A place where fresh water and salt water meet, where a river flows into the sea.

**Extinct** - When the last living member of that species dies and that type of animal is gone forever.

**False Crawl** - When a mother turtle comes up on the beach but doesn't make a nest.

**Green Turtle** - An endangered sea turtle named for the green body fat under its shell.

**Hatchling** - Baby turtles that have just come out of their shells.

**Hawksbill turtle** - An endangered sea turtle with a hook shaped beak, killed for its shell.

**Kemp's Ridley Turtle** - The smallest and most rare of all the endangered sea turtles.

**Leatherback Turtle** - The largest of the endangered sea turtles. It gets its name from the leathery covering on its carapace.

**Loggerhead Turtle** - A threatened sea turtle, named for the shape of its head.

**Migration** - Traveling from one area to another, sometimes for food or to mate.

**Plastron** - The bottom of the turtle shell.

**Poachers** - Humans that hunt animals illegally. Laws in the U. S. protect endangered and threatened animals from being hunted or killed.

**Predators** - Animals that hunt and eat other animals for food.

**Sea Grass** - Grass that grows under water, usually in a large area called a bed. A good source of food and habitat for many types of sea life.

**Scutes** - The scales that cover a turtle shell.

**Threatened** - At risk for becoming endangered, and possibly headed towards extinction.

**Turtle Excluder Devices** - TED's, a device that allows turtles to escape from a shrimp net, while keeping the shrimp in.
About the Author

Zander is a 15-year-old student at Lemon Bay High School in Englewood, Florida. He lives on Palm Island, a bridgeless barrier island. He has been giving “Turtle Talks,” a conservation presentation, for four years. He speaks at schools, libraries, and nature events. Zander has received the Mote Marine Lab Sea Turtle Conservationist of the Year Award in 2002, the Dream It Do It Award from Youth Venture in Washington D.C. in 2003, the Land, Sea and Air Preservation Award from Sarasota County Environmental Services in 2004, the Leo “Pete” Cypher “Service Above Self” Rotary Award in 2005, the International Eco-Hero Award from Action For Nature in 2005, the Brower Youth Award in 2005, the Florida Wildlife Federation Youth Conservationist Award in 2005, and was granted the Gloria Barron Prize in 2006. Zander enjoys sailing, playing golf, and basketball.

About the Illustrator

Linda Soderquist is an elementary teacher in Venice, Florida. She is also a watercolor artist, who regularly shows her work in galleries and exhibits. She resides on Little Gasparilla Island, a bridgeless, barrier island off southwest Florida. Linda is the primary permit holder for all sea turtle activities on Little Gasparilla Island, and is responsible for turtle nest data collection, investigating disorientations, and gathering information on strandings.

Turtle Truth... sea turtles remain some of the most mysterious and time-honored creatures on earth. Do all you can to help ensure the gentle sea turtle remains a part of the ocean environment.
Thank You from the Author

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