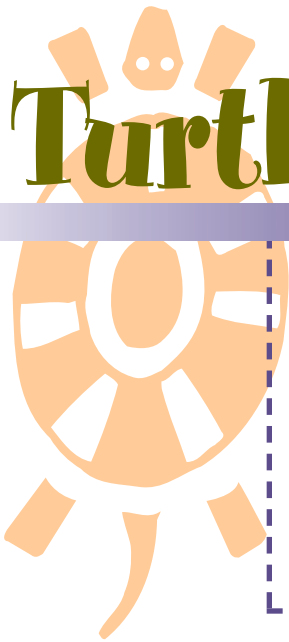


Turtle Tales



Life Skill: Communication

Project Skill: Researching and describing native turtles

Objective: Educate peers about turtles found locally

Success Indicator: Participants collect accurate and interesting information about turtles and communicate their findings to a group

Provisions Needed

- Craft material or recyclable household items
- Paints
- Glue, tape, staples, or other fasteners
- Markers
- Poster paper
- Reptile field guides and other reference material



Trailhead

What animal has been around since before dinosaurs, lays eggs, has a soft body surrounded by bony plates, and can be found on every continent except Antarctica? Turtles. The unique thing about turtles is their shell. It encloses and protects the turtle's soft body parts.



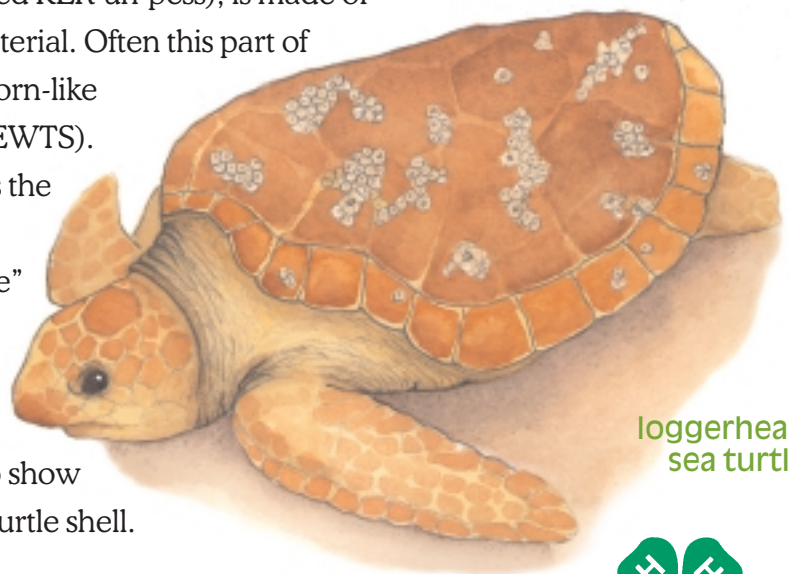
Trailblazing

Use materials you find around your house to create a model of a turtle shell. Examine actual turtles or use pictures to decide how best to design your turtle. Pick a species of turtle that is found where you live. Remember that a turtle's shell has many different parts. The top part of the shell, the **carapace** (pronounced KER-uh-pess), is made of flattened ribs covered with other bony material. Often this part of the shell has an additional layer of hard, horn-like structures called **scutes** (pronounced SKEWTS). The bottom part of the shell, which covers the turtle's underside, is called the **plastron** (pronounced PLASS-tron). A bony "bridge" on each side of the body connects the carapace and plastron. Don't forget to include hinges on the plastron if your turtle species has them. Also, find a way to show the internal support of fused ribs on your turtle shell.

When your model is complete, paint, color, or decorate your homemade shell in the same manner as your chosen turtle species.



make a turtle shell



loggerhead sea turtle



18 U.S.C. 707

Turtle Tales

Use your turtle shell as a prop in an informative talk about turtles. Try to find as much local information as possible about your turtle. Is it plentiful in your area?

Internet Resources

- <http://endangered.fws.gov/wildlife.html>
- <http://ecos.fws.gov/webpage>
- <http://www.parcplace.org/default.htm>
- <http://www.uga.edu/~srelherp/index.htm>

Does it have any special protection such as that given to a rare or endangered species? Are there laws that prevent hunting or capture? Use the “Field Notes” section below to guide your investigation.



Field Guide

There are about **250 species of turtles** in the world. About 50 of these can be found in North America. Depending on the species, turtles can live on land, in fresh water, and in salt water.

More than **40 turtle species** are classified as endangered throughout the world. Four sea turtles and two pond turtles are classified as endangered in the United States, and many more are threatened.

Like all reptiles, **turtles are cold-blooded.** This means they do not have a constant body temperature, as humans and other mammals do. A reptile's body temperature changes with the temperature of the surrounding environment. As body temperature decreases, breathing and heartbeat slow.

Although **turtles have no teeth**, they have a sharp bony jaw, often referred to as a beak. The jaws are good cutting instruments and can easily tear plant material and capture prey.

Most **turtles lay eggs** between late spring and late autumn. All North American turtles lay eggs on dry land, even if the species spends most of its life in water. The mother turtle leaves the eggs to hatch on their own after being warmed and incubated by the sun. The temperature of the nest will determine the sex of the baby turtles. Warmer temperatures lead to mostly female turtles, and cooler temperatures lead to mostly male turtles.

Six groups of turtles are found in the United States: snapping turtles, musk and mud turtles, pond and box turtles, tortoises, softshell turtles, and sea turtles.



Suggested Reading

- Behler, John L., and F. Wayne King. *The Audubon Society Field Guide to North American Reptiles and Amphibians*. New York: Alfred A. Knopf. 1992.
- Conant, Roger, and Joseph T. Collins. *Reptiles and Amphibians: Eastern and Central North America (Peterson Field Guide Series)*. New York: Houghton Mifflin. 1998.



Turtle Tales



The Extra Mile

A **herpetologist** is a person trained to study reptiles and amphibians. Find and interview a herpetologist. Try to learn new information about turtles that you weren't able to find in your reading. Ask what the person's special interests are regarding turtles. Share what you learned in a presentation.



Field Notes

diamondback
terrarin
hatchling



SHARE

- What was the most surprising or interesting fact you discovered about turtles?
- What can be done near your home or school to help protect turtles?
- What are the laws in your state regarding the collection of reptiles or parts of reptiles?
- What other designs in nature or human-made objects function like a turtle shell?
- What kind of feedback did your audience give you that let you know your presentation was good or needed improvement?

PROCESS

- Why can't a turtle crawl out of its shell?
- Why are turtles more active when the weather is warm?
- How does the shape of a land turtle's shell differ from the shell of a turtle that spends lots of time swimming? Are there differences in other body parts, too?
- Why do you think turtles have different markings and colors?
- How did you decide how to best organize your presentation?



GENERALIZE

- Why is it important to have a **niche** in the world (finding a place where you can best live and be productive) like different species of turtles?
- What other times do you plan to gather and share information with your friends or classmates?

APPLY

- How can you improve your communication skills the next time you make a display or presentation?