



Turtle Shell Craft

Age/grade: Pre-K through 2

Duration: 20-30 minutes

Overview: A small class or group of students will cut and decorate a paper bag to wear. The bag will resemble a turtle's shell.

Goal: Students will identify the parts of a turtle shell
Students will identify the functions of a turtle shell

Subject Area: Science

Standards: **NYS Elementary Science Core Curriculum**

Standard 4: The Living Environment

Key Idea 2: Organisms inherit genetic information in a variety of ways that result in continuity of structure and function between parents and offspring.

Key Idea 3: Individual organisms and species change over time.

Key Themes: Adaptation, Role-playing, Interpretation

Vocabulary: adaptation, scute, carapace, plastron

Materials: Paper Shopping Bags (one per student, plus extras for mistakes and rips)
Scissors
2" x 2" construction paper squares (scales)
Glue sticks

Background: Turtles are unlike anything living on the earth today. Turtles' evolved about 250 million years ago - their ribs fused to their shell and their leg bones tucked inside their body cavity. This unique design has enabled turtles to witness the age of dinosaurs and the emergence of birds and mammals. In addition, turtles are believed to live longer than any other vertebrate on earth.

Because of their unique design and structure, there are numerous terms for each minute part of a turtle body. For this activity, we will focus on just a few. Turtle shells are divided into two halves: an upper section named the carapace and a lower section named the plastron. A turtle's shell is its backbone and ribs. Turtles cannot come out of their shells, just like we cannot take our bones out of our bodies. Both the carapace and plastron are made up of a number of bones, and these are covered with scales or scutes. Scutes give the turtle its design and color and are shed periodically as the shell grows. All turtles with hard shells have 13 large scutes on

the back of their shell (the leatherback sea turtle and the fresh-water soft shelled turtle don't have scaled shells). A turtle's shell grows with it, just like a human backbone.

Activity:

For younger students with limited scissor skills, the bags need to be cut before hand.

- 1) Cut armholes out of the bags. The hole should be large enough for the student's arm plus shirtsleeves.
- 2) Cut a head hole. The hole should be about half of the bag bottom surface, and oval.
- 3) Cut a slit on one side, from the head hole to the bag mouth.

The bag should now fit like a vest.

- 4) On the uncut face of the bag, student's can glue 2" x 2" construction paper squares (scales) to the bag.

Tips:

Punch starter holes for students where the arms and head holes go.

Have the entire class do each step all together. Students will watch one another, and proficient students will help others.

Have scotch tape handy - not all glue sticks hold well enough.

Assessment:

Have students draw a turtle and label its parts.

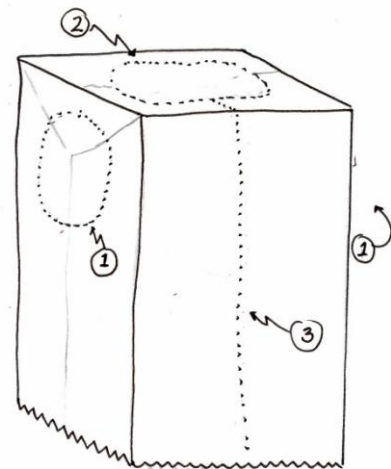
Activity & Technology Extensions: (Suggested Story Time Reading)

PreK-K

How the Turtle Got Its Shell by Justine Fontes and Ron Fontes
Assorted tales from around the world

PreK-2

One Tiny Turtle by Nicola Davies
Story of a baby loggerhead sea turtle



Grades 1-2

Box Turtle at Long Pond by William T George

Follows a box turtle exploring its world

Resources: Tynning, Thomas, Stokes Nature Guides: A Guide to Amphibians and Reptiles, Little, Brown and Company, 1990

Behler, John L. and F. Wayne King, The Audubon Society: Field Guide to North American Reptiles & Amphibians, Alfred A. Knopf, 1985