Activity Two

Phylum Fun for Young Children

Episode Title: Any and all episodes, excluding "The First Hunter" (Flatworms)

Activity Subject: Body plans and parts, animal behaviors, diversity, motion

Grade Level: K-2

National Science Education Standards: Standards are noted as (standard:benchmarks).

(12:1), (13:1)

Grades K-2

Life Sciences (5:1,2), (6:2), (7:2)Physical Science (10:3,4,5)

Learning Objectives: Students learn about the body plans and parts of animals and how they use them.

Assessment: Students make models and other objects; use their own bodies to imitate animal structures, behaviors, and movements; and discuss what they make and how they imitate the animals.

Time: Flexible, based on available time and number of video segments viewed; fifteen minutes to one class period; multiple class periods if desired

Group Size: Entire class

Materials and Preparation

Nature of Science

View and pre-select age-appropriate video segments to support activities planned from the "Video Time Code Index." See additional materials and preparation for each activity selected.

Procedures

- 1) As a class, view pre-selected segments of *The Shape of Life* videos.
- 2) See additional instructions for each activity selected.

Procedure:

- 1) Put a small amount of paint in a shallow dish.
- 2) Dip sponge into paint.
- 3) Lightly press sponge on paper to create an underwater scene of beautiful sponges. Draw water flowing through your sponges and other animals living with your sponges.
- 4) Let dry.

Cnidarian Fun!

Make sponge-paint wrapping paper

Sponge Fun!

Materials:

- natural and synthetic sponges of different textures
- paint
- paper

Make a jellyfish

Materials:

- paper plate
- watercolors
- · curling ribbon
- paper to cut in strips
- · scissors, glue or tape

Procedure:

- 1) Paint paper plate with watercolors to look like the body of a jellyfish. Make your designs radiate out from the center of the plate. Some jellies have tiny eyespots around the edges of the bell, and the edges are sometimes scalloped. Draw eyespots and/or scallop the edges of the plate. Let plate dry.
- 2) Cut and curl long pieces of ribbon for the tentacles. Attach ribbon to outside of the paper plate.
- 3) To form the mouth, cut out strips of paper wider and shorter than the ribbon for the tentacles. Make the edges of the strips of paper wavy and uneven. Attach several strips of paper to the center of the underside of the jellyfish to form the mouth.
 - 4) With a piece of string, hang your jellyfish from the ceiling.

The Shape of Life Activity Guide

Be a jellyfish

Materials:

- long pieces of fabric, scarves, or crepe paper
- · slow, flowing music

Procedure:

1) Use the fabric as your tentacles as you slowly drift through the sea to the music.

Annelid Fun!

Make an earthworm

Materials:

• clay

Procedure:

 Roll clay between your hands to make a worm. Use a toothpick to draw the segments on your earthworm. Make a mouth at one end.

Be an earthworm

Materials:

your body

Procedure:

1) Lie on the floor and wiggle like a worm.

Make a worm farm

Materials:

- clear jar or box
- soil
- earthworms
- moisture

• organic material for food

Procedure:

- 1) Put moistened soil in the jar or box.
- 2) Add the earthworms and organic matter for food.
- 3) Keep worm farm in a dark, cool place.
 Observe the worms' behavior.
- 4) After a few days, return the worms to the garden where you found them.

Arthropod Fun!

Make a crab or insect

Materials:

- pictures of arthropods
- clay, pipe cleaners

Procedure:

- Look at pictures of arthropods.
 Notice the number of legs and antennae and their different shapes.
- 2) Make the arthropod's body out of clay. Use pipe cleaners to make the different types of arthropod appendages. Do you know how your arthropod uses its different appendages?

Walk like a crab

Materials:

your body

Procedure:

1) Use your hands and feet to crawl sideways across the floor.

Make a butterfly

Materials:

- paper
- crayons, markers
- clothes pins
- pipe cleaners

Procedure:

- Fold the paper in half and cut out the butterfly's wings. Open up the wings and color both sides with the same patterns and colors.
- 2) Use the clothespin for the butterfly's body. Attach the clothespin between the two wings.
- Make antennae out of the pipe cleaner. Attach to the butterfly's head.
- 4) Take your butterfly outside and dance between flowers with it.

Be an insect

Materials:

• your body

Procedure:

- 1) Buzz and fly like a bee.
- 2) Fly gracefully like a butterfly.
- 3) Think of ways to act like other types of insects. Show friends and family your imitations.

Activities

Mollusc Fun!

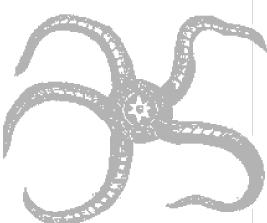
Make a squid windsock

Materials:

- tissue paper
- string
- glue
- scissors

Procedure:

- Cut a large rectangle of tissue paper.
 On one of the short sides, fold over one inch of tissue paper. Cut a piece of string long enough to be glued into the fold and extend out enough to be tied. Glue the string into the fold. This becomes the reinforced end of the windsock. Let dry.
- 2) Cut one-inch-wide strips of tissue paper for the eight arms. Cut two longer strips of tissue paper for the tentacles. Glue the arms and tentacles on to the other short side of the rectangle. Let dry
- 3) Roll the rectangle into a tube and glue together. Let dry.
- 4) Add eyes to the head of your squid.
- Fly your squid windsock from a long string tied to the extended piece of string on the reinforced end of the windsock.



Echinoderm Fun!

Make a brittle star

Materials:

- index card
- pipe cleaners
- glue
- crayons

Procedure:

- 1) Fold the index card in half. Cut out two circles for the brittlestar's body. Color the body pieces.
- 2) Glue the ends of five pipe cleaners to one of the circles made out of the index card.
- 3) Glue the other circle on top of the pipe cleaners so you can no longer see the ends and both circles line up. Let dry.
- 4) Shape the pipe cleaners to mimic the rays of a brittle star.

Make a sea urchin

Materials:

- half of a Styrofoam ball
- red, green, or purple paint
- toothpicks

Procedure:

- 1) Stick toothpicks into the Styrofoam ball.
- 2) Paint the toothpicks and Styrofoam ball.
- 3) Add a mouth to the underside of the urchin.

Chordate Fun!

Move like a chordate

Materials:

• your body

Procedure:

 Think of a chordate. Imitate how it moves. For example: hop like a frog, slither like a snake, jump like a kangaroo, stalk like a lion, or walk like a human being. Use your imagination!

Sound like a chordate

Materials:

your vocal cords

Procedure:

1) Think of a chordate. Imitate the sound it makes. For example: call like a bird, moo like a cow, screech like a monkey, bark like a dog, or talk like a human being. Use your imagination and see how many different animal sounds you can make.

See

www.shapeoflife.org for links to additional activities.