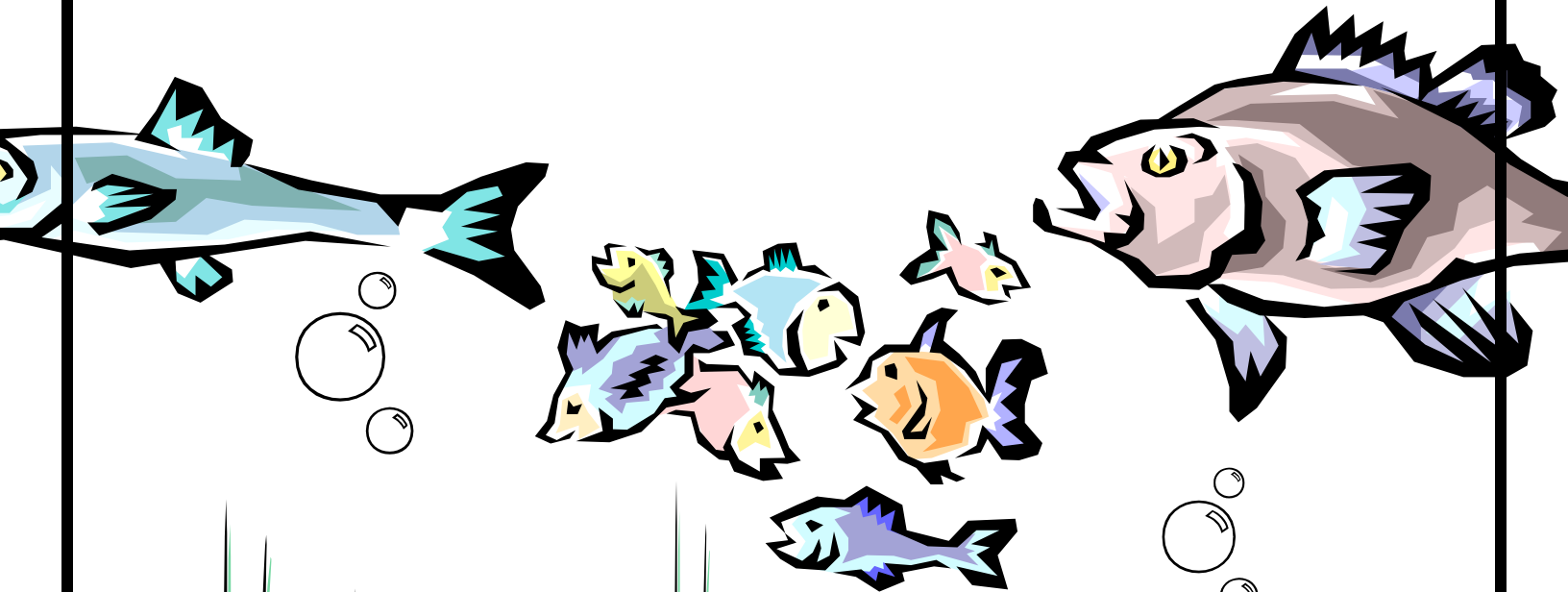


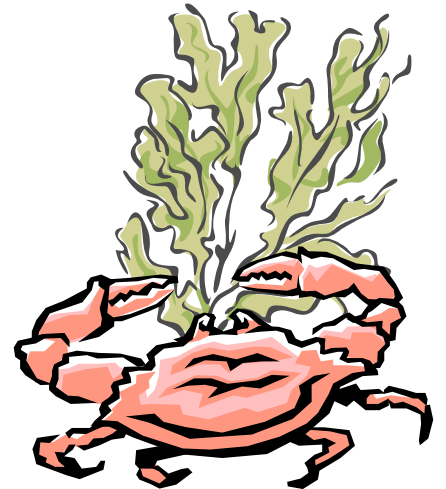
DOWN BY THE SEASHORE

PRE-KINDERGARTEN

*Pre-Visit
and
Post-Visit Activities*



**Assateague Island
National Seashore**



Maryland Voluntary State Curriculum

Down by the Seashore

Pre-Kindergarten

Assateague Island National Seashore Program

Science Content Standards

1. Skills and Processes – Students will demonstrate the thinking and acting inherent in the practice of science.

A. Scientific Inquiry. 1. Seek information through observation and exploration.

B. Critical Thinking. 1. Identify similarities and differences among objects and materials.

C. Applications of Science. 2. Use scientific knowledge to solve everyday, science-related problems.

D. Technology. 1. Identify models of real objects.

E. History of Science. 1. Recognize that everyone can do science and invent things.

2. Earth/Space Science – Students will use scientific skills and processes to explain the chemical and physical interactions (i.e., natural forces and cycles, transfer of energy) of the environment, Earth, and the universe that occur over time.

A. Materials and Processes That Shape A Planet. 1. Identify and describe Earth materials based on their physical properties.

E. Interactions of Hydrosphere and Atmosphere.

3. Life Science – The students will use scientific skills and processes to explain the dynamic nature of living things, their interactions, and the results from the interactions that occur over time.

A. Cellular. 1. Recognize living and non-living things.

B. Genetics. 1. Observe and describe familiar animals and their offspring.

4. Chemistry – Students will use scientific skills and processes to explain the composition, structure, and interactions of matter in order to support the predictability of structure and energy transformations.

A. Properties of Matter. 1. Use senses to identify the similar and different physical properties of familiar objects.

5. Physics – Students will use scientific skills and processes to explain the interactions of matter and energy and the energy transformations that occur.

A. Mechanics. 1. Identify the different ways that objects move.

B. Thermodynamics. 1. Recognize that the sun warms the land, air, and water.

D. Wave Interactions. 2. Recognize that different objects make different sounds.

(Selected standards may vary and will be represented in pre/post visit materials and education programming)

FISH HATS!



Pre-Visit
Assignment!!

Overview: This activity is required before your visit to Assateague. Fish are specialized animals with interesting behaviors. You will bring your fish hat to Assateague!

Theme: Fish have special ways of living in the water.....?

Objectives: Students will learn the basic parts of a fish.
Students will learn how fish move.
Students will learn how some fish live.

Teacher preparation: Make copies of both sides of the fish for each student. These fish will be "hats" and may double as name tags!

Materials: Heavy paper or construction paper, paper clips, crayons, scissors, heavy marker and a stapler.

Procedure:

Make sure each student has both halves of their fish.

Discuss parts of the fish:

mouth-for eating and circulating water through gills

eye-to see, to see food and predators

gills-fish "breathe" with their gills, circulate oxygen-filled water through gills

tail-helps fish to swim

fins-helps steer the fish

scales-protects the fish's body, scales are usually covered in protective slime

Teacher may want to write each student's name on the fish as a "name tag"

Students may color and decorate their fish.

Cut out each half of the fish.

Staple at the mouth, the tail and the dorsal fin (top fin)

Additional staples or paper clips may be needed for a proper fit.

Students will need to wear their fish hats to Assateague on the day of their program. These hats will be used in the program to illustrate schooling behavior as an adaptation for survival.

DOWN BY THE SEASHORE

POST-VISIT!



Overview: An post-visit activity designed to reinforce students familiarity of the many wonderful creatures that live at Assateague Island and in the surrounding waters.

Theme: Many different animals live in and around Assateague Island.

Objectives:

-Students will review what they have learned about a few of the different kinds of animals that live on the land and in the waters at Assateague.

Teacher preparation: Make a copy of the ocean beach sheet and Assateague animals for each student.

Materials: Crayons, scissors and glue.

Procedures:

Start with the ocean and beach page.

-Discuss oceans: salty water, largest body of water, home to many very big and very small animals

-Color

-Discuss the beach: sandy, waves, no plants live here, many animals can find food here but very few animals can live here all the time

-Color

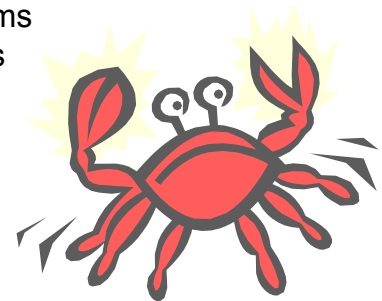
Next, discuss the Assateague animals sheet.

-Discuss each creature together.

- flounder-a flat fish that lives on the bottom
- snail (knobbed whelk)-lives on the ocean bottom, makes it own shell
- horseshoe crab-lives on the ocean bottom, it crawls and swims
- herring gull-usually lives near water, eats fish and scavenges
- piping plover-lives on beaches, feeds near the shoreline
- shark-lives in the ocean, cartilaginous fish (cartilage bones)
- tern-lives near salt water, dives and catches small fish
- surf clam-lives under the ocean bottom
- striped bass-found in bays, oceans
- bluefish-very toothy fish found in oceans
- horse-a wild herd of horses live on Assateague, they eat grass and leaves

-Color, cut out and glue the animals on the ocean beach page in its proper home.

-Display the students "oceans" in the classroom!



Extensions:

-add more land and ocean creatures

-make a classroom mural