Aquarium Webcam Resource Kit
Lesson Outline: *Ocean Habitats*
K-2nd Grade

Next Generation Science Standards:

- **K-LS1-1**. Use observations to describe patterns of what plants and animals (including humans) need to survive.
- **K-ESS3-1**. Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.
- **K-ESS3-3**. Communicate solutions that will reduce the impact of humans on the land, water, air and/or other living things in the local environment
- **2-LS4-1**. Make observations of plants and animals to compare the diversity of life in different habitats.

Key Words:

- **Habitat:** the natural home or environment of an animal, plant, or other organism.
- **Observation:** the action or process of looking at something carefully to gain information.

Supplies:

- *Ocean Habitats* Video
- *Ocean Habitats* Worksheet
- Computer & projector to show Blue Cavern & Tropical Pacific Webcams: http://www.aquariumofpacific.org/exhibits/webcams

Step 1: Class Discussion

- On land there are many different places an animal can live (*have students come up with some examples*).
- We call these animal homes, *habitats.*
- *Think Pair Share*: Think of an animal that lives in the ocean and share with your neighbor what you think its habitat is like.
- Share as a group some examples of ocean habitats. Today we will be exploring two different habitats, the kelp forest and the coral reef.

Step 2: Play *Ocean Habitats* Video & Follow up

- Note: at the end of the video there are two slides with animals from each habitat shown as review.
- Prompts
    - What did you learn about these different underwater habitats?
    - What was the same or different?

Step 3: Webcams & Ocean Habitat Worksheet

- Watch the Blue Cavern and Tropical Reef exhibit webcams to fill out the *Ocean Habitat* worksheet.
- Worksheet directions: build your own kelp forest and coral reef by matching animals to their habitats. Students can draw in additional animals they see on the webcams.
- Class discussion:
    - Why do you think these animals live in a coral reef or a kelp forest?
      Places to hide and find food.
    - How does coral protect itself?
      Coral is protected by a hard material all over its body called an exoskeleton.
    - Give some examples of how a fish might protect itself?
      Fish can hide in the coral reef or kelp. Have the students find fish that might be using color to help them camouflage. Some fish might swim faster than the others. Have students make predictions about the fastest fish in each habitat. What made them faster than the other fish?
    - How is coral different from kelp?
      Coral is an animal and needs food. Kelp (algae) is like a plant and needs sunlight to grow its own food. Both provide food and shelter for other animals.
    - Do all of the animals eat the same food?
      Hint: have students look at their mouths. Many of the animals eat food that is of different sizes and find it in different places in their habitat.

Step 4: Ocean Protectors

- As a class, explore ways you can reduce your impact on ocean habitats.
    - How can we protect our oceans?
      Small actions have a big impact! For example: reduce, reuse, recycle when possible. Turning off lights when not in use, leaving natural areas as you find them, participating in a beach or neighborhood cleanup, and learn and share as much as you can about the ocean!
- Have students draw themselves protecting the ocean. When finished, have them share their art and ideas with a partner or as a class.

Additional Resources:

- Aquarium of the Pacific: *Animal Database*
  http://www.aquariumofpacific.org/onlinelearningcenter
- Environmental Protection Agency: *What You Can Do to Help Protect Coral Reefs*
  https://www.epa.gov/coral-reefs/what-you-can-do-help-protect-coral-reefs
- NOAA Ocean Service: *Things You Can Do*
  https://oceanservice.noaa.gov/facts/thingsyoucando.html