Aquarium Webcam Resource Kit
Lesson 3 "Ocean Drifters"
3rd-5th Grade

Next Generation Science Standards:

- **3-LS1-1** Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.
- **4-LS1-1** Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

Supplies:

- "Ocean Drifters" video
- Ocean Ranger Worksheets
- Computer & projector to show *Sea Jellies* Webcam: http://www.aquariumofpacific.org/exhibits/webcams

Step 1: Discussion

- *Think Pair Share:* What would you see if we were to use a microscope to investigate ocean water?
- If you use a microscope to investigate sea water you may find plankton! Plankton is a name for animals, plants, and algae that drift in the ocean's currents.

Step 2: Play "Ocean Drifters" Video

- Post Video Prompt:
  - Not all animal plankton stays small, what are some examples of plankton that grow into larger animals?
    - *Lobsters, sea stars, and barnacles are examples of plankton that hatch from eggs and drift until they grow large enough to settle on the bottom of the ocean.*
    - *Fish larva hatch from eggs and drift until they are large enough to swim against ocean currents.*
  - Why is plankton important to our oceans and us?
    - *Many ocean food webs start with plankton.*
    - *Phytoplankton (plant/algae plankton) produces more than half of all the oxygen on the planet.*

Step 3: Sea Jelly Webcam & Ocean Ranger Worksheet

- Watch the *Sea Jelly* webcam to fill out the Ocean Ranger "Ocean Drifters" worksheet.
- Encourage the students to list or draw their observations.
    - Look closely at movement, colors, shapes, patterns. If you have time compare the jellies to another webcam animal.
    - What are students curious about? Have students record their questions.
    - In pairs or groups have students share their observations and questions.
    - Pick a few questions to further investigate.
- See if students can identify the parts of the moon jelly and the Pacific sea nettle.
    - What are some differences and similarities they notice about the moon jelly and the Pacific sea nettle?
    - Why would they have differently sized tentacles?
        - *The size of the tentacles match the size of the food they catch. Moon Jellies eat very small plankton and Pacific sea nettles eat larger plankton.*
    - What did you notice the bell is used for?
        - *The main body of the sea jelly is called a bell. The bell contains main organs like the stomachs (they can have multiple and are a horseshoe shape). The bell also contains the main circular muscle that squeezes and releases to help the jelly pulse through the water.*

  Fun Facts:
    - A group of jellies is called a *Smack*
    - Jellies do not have a brain

Resources

- Find out more about sharks at the Aquarium of the Pacific's On-line Learning Center: http://www.aquariumofpacific.org/onlinelearningcenter