Fish Tales
Classroom Activity Guide
Activity Description: Students will learn about various ocean habitats and the fish that live in them by creating an ocean habitat diorama. **Note: This curriculum can be done in the classroom or as a take-home project.**

Objective: Students will be able to describe the typical characteristics of fish that live in various ocean habitats.

Grades: 1<sup>st</sup> – 3<sup>rd</sup>

California State Standards:
- Grade 1: 2a, 2c,
- Grade 2: 2a, 2c, 2d
- Grade 3: 3a, 3b

Vocabulary: habitat, camouflage, adaptation, pelagic, benthic

Subject: Science, Art

Time: 120 minutes

Materials:
- Shoeboxes (one for each student)
- Markers or crayons
- Colored construction paper
- Scissors
- Glue
- Tape
- Various craft supplies (aluminum foil can be fun for shiny fish)
- My Ocean View Worksheet
- Photos and/or guidebooks to illustrate various fish adaptations and camouflage. An ocean picture book would also work well. Recommended: Ocean Hide and Seek, by Jennifer Evans Kramer

Teacher Preparation:
Gather field guides, photos, and/or books. If constructing the dioramas in the classroom have students start bringing shoeboxes to class at least one week in advance to ensure that each student has a box. Gather various art supplies. Photocopy a My Ocean View Worksheet for each student.

Activity Procedure:
1. Discuss animal adaptations, including camouflage and how fish have various adaptations suited to their specific ocean habitat. Read a book to illustrate this concept if desired. Have students name various ocean habitats (open ocean, ocean bottom, deep ocean, kelp forests, tidepools).
2. Allow students to choose (or assign) an ocean habitat and have them write the name of their habitat on their worksheet.
3. Have students research their habitat using the various photos or books. Students should record the information on their worksheet.
4. Students are now ready to create their own ocean view diorama, featuring their ocean habitat and the fish that would live there. **Note: this can be done as a take-home project.**
5. Have each student share their diorama with the class, describing why the fish in their diorama look as they do.

**California State Science Standards:**

**Grade 1:**

2. Plants and animals meet their needs in different ways. As a basis for understanding this concept:
   a. Students know different plants and animals inhabit different kinds of environments and have external features that help them thrive in different kinds of places.
   c. Students know animals eat plants or other animals for food and may also use plants or even other animals for shelter and nesting.

**Grade 2:**

2. Plants and animals have predictable life cycles. As a basis for understanding this concept:
   a. Students know that organisms reproduce offspring of their own kind and that the offspring resemble their parents and one another.
   c. Students know that many characteristics of an organism are inherited from the parents. Some characteristics are caused or influenced by the environment.
   d. Students know there is variation among individuals of one kind within a population.

**Grade 3:**

3. Adaptations in physical structure or behavior may improve an organism’s chance for survival. As a basis for understanding this concept:
   a. Students know plants and animals have structures that serve different functions in growth, survival, and reproduction.
   b. Students know examples of diverse life forms in different environments, such as oceans, deserts, tundra, forests, grasslands, and wetlands.
Name: __________________________

My Ocean View

Ocean habitat: ________________________________

Circle the things that might be found in your ocean habitat:

- Kelp
- Shells
- Rocks
- Deep water
- Sand
- Shallow water
- Coral
- Sunlight
- Seagrass
- Algae

List five words to describe the fish that live in your habitat:

1. ________________________________
2. ________________________________
3. ________________________________
4. ________________________________
5. ________________________________
Design-a-Fish

**Activity Description:** Students will learn about fish anatomy by building their own fish. Students will write a story about their fish.

**Objective:** Students will be able to name the basic structures of a fish and their functions.

**Grades:** 1st – 3rd

**California State Standards:**
- Grade 1: 2a, 2c, 2d
- Grade 2: 2a, 2c, 2d
- Grade 3: 3a, 3b

**Vocabulary:** fins, scales, gills

**Subject:** Science, Language Arts

**Time:** 60 minutes

**Materials:**
- Scissors
- Markers or crayons
- Tape or glue
- Googly eyes (optional)
- Fish Parts templates printed on cardstock
- Parts of a Fish worksheet
- Writing paper
- Fish storybook (recommended: Fabulous Fishes by Susan Stockdale, or The Pout-Pout Fish by Dan Hanna)

**Teacher Preparation:**
Print the Parts of a Fish worksheet and copy for each student.

Print the templates of fish parts onto cardstock. Print enough copies so that each student gets one of each part (body, tail, pectoral fin, etc.). For example, if there are 21 students, you will need 7 copies of each of the 3 body shapes. For sheets with multiple shapes, cut the shapes apart (students will cut the shapes out themselves).

Make your own fish as an example.

**Activity Procedure:**
1. Read the fish storybook. Use the illustrations to discuss with students the parts of a fish. How do the fish use their various parts in the story? What other functions do they have?

2. Have students fill out their Fish Parts worksheets and review the function of each part.

3. Tell students that they will be designing their own fish using various fish parts.

4. Set out the different shapes, grouping them by part (body, tail, pectoral fin, etc.). This way, each student can choose one from each set.

5. Have the students choose and cut out one of each part.

   **Note:** Have students cut along the dotted lines on both the body and pectoral fins. They will be used for assembly to create a 3-D effect.

6. Have the students draw gills and scales on the body of their fish. Give them time to color the various parts. Pass out googly eyes (if desired).

7. Once all their parts are colored, students can tape (or glue) the fins to the body. To attach the pectoral fins, have students slide the slit on the fins into the slit on the body until the ends of the slits come together.

8. Have each student write a story about their fish. Some optional topics to include:
   - Where does their fish live? Why?
   - What does their fish eat? How does it catch its food?
   - What friends does their fish have?
   - How does their fish protect itself from danger?

**California State Science Standards:**

**Grade 1:**

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   - Students know different plants and animals inhabit different kinds of environments and have external features that help them thrive in different kinds of places.
   - Students know animals eat plants or other animals for food and may also use plants or even other animals for shelter and nesting.
   - Students know how to infer what animals eat from the shapes of their teeth (e.g. sharp teeth eats meat; flat teeth eats plants).

**Grade 2:**

2. Plants and animals have predictable life cycles. As a basis for understanding this concept:
   - Students know that organisms reproduce offspring of their own kind and that the offspring resemble their parents and one another.
   - Students know that many characteristics of an organism are inherited from the parents. Some characteristics are caused or influenced by the environment.
   - Students know there is variation among individuals of one kind within a population.

**Grade 3:**

3. Adaptations in physical structure or behavior may improve an organism’s chance for survival. As a basis for understanding this concept:
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   - Students know examples of diverse life forms in different environments, such as oceans, deserts, tundra, forests, grasslands, and wetlands.
Parts of a Fish
Label the fish using the parts listed below.

1. ____________
2. ____________
3. ____________
4. ____________
5. ____________
6. ____________
7. ____________
8. ____________

Eye – Fish have eyes to see, just like we do.
Mouth – Fish have mouths to eat their food.
Gills – Fish breathe in water with their gills.
Scales – Fish have scales on their skin for protection.
Fins – Fins (dorsal, pectoral, pelvic) help fish to swim in water.
Tail – Just like their other fins, a tail fin helps fish to swim.
Fish Parts Template
(1 of 5) Body Shape
Fish Parts Template
(2 of 5) Body Shapes
Fish Parts Template
(3 of 5) Tail Fins
Fish Parts Template
(4 of 5) Pectoral Fins
Fish Parts Template
(5 of 5) Top (Dorsal) Fins and Bottom (Pelvic) Fins