

Teacher's Name: Dr. Hope King

Subject/ Grade: Kindergarten

Lesson Title: Exploring STEAM with our Pet Fish

### **Objective:**

Students will develop a deeper understanding of various topics including animal care, habitats, colors, and numbers, by actively engaging with our classroom pet fish. This interactive and progressive lesson aims to challenge students to expand their knowledge while incorporating the pet fish as an integral part of the science, language arts and math curriculum.

### **Standards:**

- ELA.K.LI.CC.4: Identify new meanings for familiar words and apply them accurately (e.g., knowing duck is a bird and learning the verb to duck).
- MATH.K.CC.B.4: Understand the relationship between numbers and quantities; connect counting to cardinality.
- SCI.K.LS1.1: Use observations to describe patterns of what plants and animals (including humans) need to survive.

### **Materials:**

- Classroom pet fish and fish tank
- Whiteboard and markers
- Colorful fish cutouts
- Fish-themed coloring sheets
- Fish-themed counting cards
- Blank journals for each student

### **Introduction (15 minutes):**

1. Gather students in a circle and introduce the classroom pet fish.
2. Discuss the importance of taking care of animals and being gentle with them.
3. Ask open-ended questions like "What do you think our fish needs to be happy and healthy?"

### **Topic 1: Fish Care and Habitats (20 minutes):**

1. Explain the basic needs of the fish, including clean water, food, and a comfortable tank.
2. Divide the students into small groups and have them take turns feeding the fish (with teacher supervision).
3. Show pictures or videos of different fish habitats (ocean, rivers, ponds) and discuss how our fish's tank imitates its natural habitat.

### **Interactive Activity 1: My Fish Journal (15 minutes):**

1. Provide each student with a blank journal.
2. Instruct students to draw and write about the fish's daily routine, including feeding and any changes they observe.
3. Encourage parents to help students complete their journal entries at home and bring them back to school.

### **Topic 2: Colors and Patterns (20 minutes):**

1. Use colorful fish cutouts to teach students about various colors and patterns.
2. Show the fish in the tank and discuss its colors and patterns.
3. Have students take turns pointing out different colors and patterns on the fish.

### **Interactive Activity 2: Coloring Fish (15 minutes):**

1. Distribute fish-themed coloring sheets.
2. Instruct students to color the fish creatively, experimenting with different colors and patterns.
3. Encourage students to describe their colored fish to their classmates.

### **Topic 3: Counting and Numbers (20 minutes):**

1. Use fish-themed counting cards to introduce numbers to the students.
2. Count the number of fish in the tank together.
3. Teach basic addition and subtraction using fish visuals (e.g., "If we add two more fish, how many will there be?").

### **Interactive Activity 3: Fishy Math (15 minutes):**

1. Provide students with fish-shaped crackers or small toys.
2. Ask them to count and group the fish in different ways (e.g., by color, size, or pattern).
3. Parents can assist students in taking photos of their grouped fish arrangements at home.

### **Conclusion and Evaluation (10 minutes):**

1. Gather the students back in a circle and review what they've learned about fish care, colors, patterns, and numbers.
2. Have students share one new thing they learned from their fish-related activities.
3. Assess students' journals, coloring sheets, and fishy math arrangements to gauge their understanding of the topics covered.

### **Homework/Extension:**

1. Encourage students to continue observing and recording their fish's behavior in their journals.
2. Ask parents to review their child's journal and discuss what they learned together.

3. Have students bring in fish-related items from home (books, toys, pictures) to share with the class.