FASHION A FISH

LEARN ABOUT ADAPTATIONS BY CREATING A FISH THAT CAN SURVIVE IN A RANDOMLY CHOSEN ENVIRONMENT

Third Grade NGSS DCI Addressed:

LS1.B Growth and Development of Organisms

LS2.A Interdependent Relationships in Ecosystems

LS2.C Ecosystem Dynamics, Functioning and Resilience

LS3.B Variation of traits

• <u>3-LS4-2</u>

<u>LS4.C</u> Adaptation

• <u>3-LS4-3</u>

Pre-Trip Information/Activities (to be done in the classroom prior to trip)

- What is Adaptation?
- Fish Adaptation Videos
- Living Things Change (Adaptation Video)

Materials:

- Worksheets, colored pencils
- Fish adaptation sheets (laminated, shared among groups)
- Various habitat cards (to be chosen randomly by groups)

Objective:

Students will learn how adaptions can help an animal survive and reproduce in their environment by choosing certain adaptations for their fish after randomly choosing an environment that it will need to survive in. FORGET WHAT YOU KNOW ABOUT FISH – THESE FISH ARE GOING TO BE SPECIAL – NO WATER NEEDED ⁽³⁾

Introduction:

Aquatic animals have gone through countless adaptations over long periods of time to enable them to survive in their habitats. Sometimes an environment will change quickly and the animals that have adaptations to match this change will be the ones to survive. When an environment changes very slowly, animals can actually evolve and develop a new adaptation to match their slowly changing environment. Explain that there four main types of adaptation:

- Protective coloration and camouflage
- Body shape and form
- Mouth type and feeding behavior
- Reproduction behavior (where and how does it lay it eggs so that they will survive?)
- Students may introduce a unique adaptation they invent

Explain that survival of a species depends on its ability to eat, not get eaten and to reproduce and grow to adulthood.

Activity:

- Divide students into groups of 4 or 5
- Each group will share a laminated fish adaptation sheet
- Each student within the group will have a 'Fashion a Fish' sheet and colored pencils
- Each group will randomly choose an environment in which their fish is to live and survive
- Each student will fashion their own fish using unique adaptations (the adaptation sheet is just a guide- students should be creative- their fish does not need water to survive)
- Each student will fill out the fashion a fish sheet and then draw their fish in their environment
- Groups do not need to draw the same adaptations for their fish
- Students can give their fish a species name

Have students share their creation and how their chosen adaptations help their fish live and survive in their environment.

Post-trip Information/Activities (to be done in class after trip)

- Have the students write an imaginative story involving the fish they created and how it lives in the given environment by describing the adaptive traits (<u>3-LS4-3</u>, <u>SEP-1</u>, <u>SEP-6</u>, SL.3.4)
- Have students do an art activity where they actually create a model of the environment that their fish lives in and write a paragraph on the adaptations needed to survive there (<u>3-LS4-3</u>, <u>SEP-1</u>, <u>SEP-6</u>, W.3.2.a-d)

FASHION - A - FISH WORKSHEET

Student Name
Environment:
Survival = able to eat, not get eaten or harmed and have babies that can grow to adults
ADAPTATIONS FOR SURVIVAL
My fish color, pattern, or camouflage:
My fish body shape, form, or features:
My fish will eat:
My fish's mouth will be:
My fish will lay its eggs:
Explain how your fish is able to survive in your environment:

Draw Your Fish in its Environment