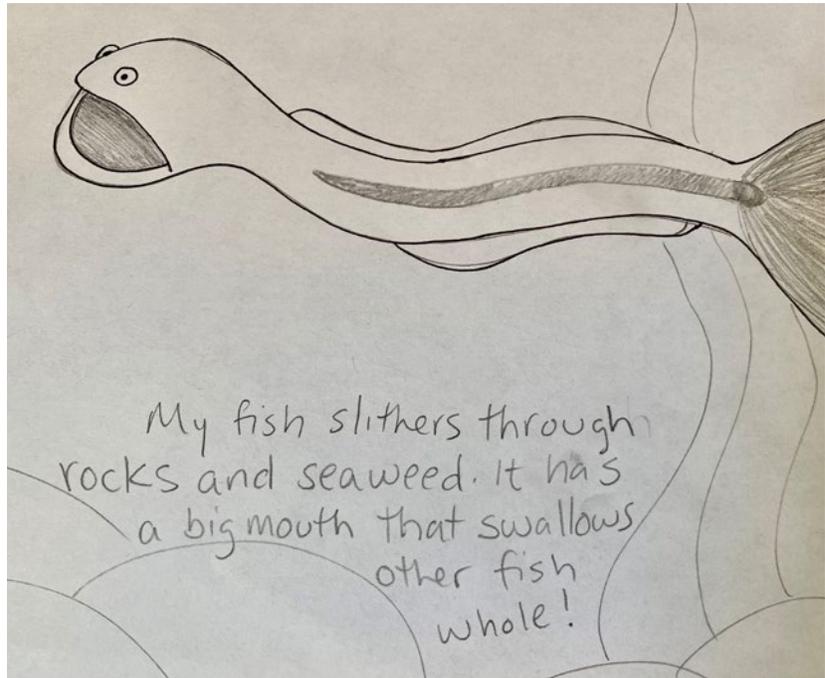


These three activities were designed for families with children in grades 3-5. They are, however, easily adapted to the classroom. Integrate them in ways that fit your classroom practices or use some of our suggestions below to extend the learning!

The activities below were designed around the content of the Fish Video on sheddaquarium.org/stayhome.

Teacher Guide

ACTIVITY 1: FRANKFIN FISH



Fish come in all shapes, sizes and colors. They also possess a wide range of strengths, features and interesting abilities including physical adaptations. This activity is all about fish diversity and student choice, so encourage students to conduct independent research to spark wonder and fascination.

- **Encourage students' curiosity** as they observe, sketch and take notes on fish they see on Shedd's website and live streaming webcams. If prompts would help your students focus their observations, ask them to record three "I notice" statements and three "I wonder" statements.
- **Ask students to pay close attention to form and function** as they design and engineer a fish (frankfinfish). These pictures will show varying physical features that function in adaptive ways.
- Students can engage further by **writing a story or poem** describing their "frankfinfish." Their creative stories should use descriptive language and science vocabulary to represent their fish designs.

Teacher Guide

ACTIVITY 3: UNSELFISH COMMUNITIES



Fish can be responsible and essential community members and work, just like humans, and are smart enough to cooperatively work together for the betterment of their population and community. In this activity, students will explore the different roles aquatic animals play to keep their diverse underwater communities thriving.

- Students will explore the roles and functions fish can play in a community: waste removal, filtering water, grooming, eating algae and pests, etc. **Encourage them to have fun and discuss ways that fishes' roles in aquatic communities are similar to human roles and work.**
- Are there important members of your school community? **Have students think of all the essential people in your school and write thank-you notes.** Extra points if they include drawings of the fish that has an analogous role to the school community member!
- **Discussing the importance of conserving all parts of an ecosystem** can help students understand the interconnectedness of nature and build empathy and understanding for how individuals in communities can have large and long-lasting impacts.
- **Lead another discussion pointing out that humans and fish regularly demonstrate "smart" and "intelligent" behaviors in a vast array of ways.** Let students appreciate the multiple means in which individuals can use their different skills to contribute to a community.



Teacher Guide

COMMON CORE CONNECTIONS:

CCSS.ELA-LITERACY.RI.3.5

Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.

CCSS.ELA-LITERACY.RI.4.4

Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.

CCSS.ELA-LITERACY.RI.5.7

Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.

Flip to the next page for NGSS connections >



Teacher Guide

NGSS CONNECTIONS:

	GRADE 3	GRADE 3	GRADE 4	GRADE 5
Standard	3-LS3-2. Use evidence to support the explanation that traits can be influenced by the environment.	3-LS2-1. Construct an argument that some animals form groups that help members survive.	4-LS1-1. Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior and reproduction.	5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect the Earth’s resources and environment.
Science and Engineering Practices	Constructing explanations	Constructing explanations	Engaging in argument from evidence	Obtaining, evaluating and communicating information
Disciplinary Core Ideas	LS3.B Variation of Traits LS4.C Adaptation	LS2.D: Social Interactions and Group Behavior	LS1.A: Structure and Function LS4.C: Adaptation	LS2.A Interdependent Relationships in Ecosystems ESS3.C Human Impacts on Earth Systems
Cross-Cutting Concepts	Cause and Effect Structure and Function	Cause and Effect	Structure and Function Cause and Effect	Systems and Systems Models
Activity	Activity 1: Frankfinfish Activity 2: Fish Transformers	Activity 3: UnselFish Communities	Activity 1: Frankfinfish Activity 3: UnselFish Communities	Acitivity 3: UnselFish Communities