

Milstein Hall of Ocean Life

BACKGROUND FOR EDUCATORS

Overview of Student Worksheets

Using worksheets, students explore the pattern of physical traits shared by fishes that live in different marine ecosystems. On the upper level of the Hall of Ocean Life, students pick three ecosystems to explore. In each ecosystem, they will pick one fish to sketch, label its body parts, and describe its colors. They will then compare all three fishes to find patterns and shared traits. Students will also compare the blue whale to the three fishes to notice patterns.

These observations help students experience a **natural phenomenon**—fishes that look different and live in different environments share similar traits. This phenomenon can serve as an anchoring point in exploration and discussion as the students explore the **investigation question**: What makes a fish a fish?

Terminology: Fish vs. Fishes

- The plural of “fish” is “fish” when referring to multiple individuals of the **same species**, such as in “a school of fish.”
- The plural of “fish” is “fishes” when referring to multiple individuals of **more than one species**, such as in “diversity of species.”

Extension Ideas

Back in the classroom, students discuss what they learned at the Museum about what makes a fish a fish. They then research how the body plans of each fish they chose help it live in its environment.

Correlation to Standards

This activity supports the following Next Generation Science Standards:

Disciplinary Core Ideas	LS3.B: Variation of Traits Individuals of the same kind of plant or animal are recognizable as similar but can also vary in many ways.
Crosscutting Concepts	Patterns Similarities and differences in patterns can be used to sort, classify, communicate, and analyze simple rates of change for natural phenomena and designed products.
Science and Engineering Practices	Obtaining, Evaluating, and Communicating Information Critically read scientific texts to determine the central ideas and/or obtain scientific information to describe patterns in and/or evidence about the natural world.