



# **PROJECT** OCEANOLOGY

## **Squid Dissection**

**Overview** Students will study in detail the external and internal characteristics of the long finned squid. They will discuss life history, adaptations and characteristics of this amazing organism!

#### **Performance Expectations**

**MS-LS1-3** Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells. *Students will identify internal and external organs and organ systems. Students will recognize the need for specialized tissues and specialized cells.* 

#### **Science and Engineering Practices**

**Asking Questions/Defining problems**: Students will identify the survival needs of all animals, and identify how those needs are met by the organs and organ systems in squid.

**Constructing Explanations/Designing Solutions:** Students will draw conclusions about squid adaptations and behavior in Long Island Sound based on the unique challenges presented by the estuary.

### **Crosscutting Concepts**

**Patterns** The students will identify patterns, differences and similarities across the Phylum Mollusca and patterns, differences and similarities to their own bodies **Structure and Function** Students will learn about form and function of various organs and organ systems in squid. They will be able to identify how these operate together as whole organism.

### **Disciplinary Core Ideas**

**MS-LS1-A Structure and Function** In multicellular organisms, the body is a system of multiple interacting subsystems. These subsystems are groups of cells that work together to form tissues and organs that are specialized for particular body functions. *Students will study internal and external organs and organ systems as a part of the whole organism.* 

### **Optional Post-Lab Assignment**

#### **MIDDLE SCHOOL**

Squid Fishery Symposium, Only One Ocean: Marine Science Activities for Grades 5-8

Students look at the socio-economic side of the squid fishery as cooperative groups representing the viewpoints of interest groups. Students discover that many people depend on squid, and more discussion can lead to solutions to the problem of diminishing squid population.

Pre- and Post-Lab Formative Assessment Amazing Squid, True or False Amazing Squid, True or False