① Mollusks

What You'll Learn:

Identify the characteristics of mollusks.

Describe gastropods, bivalves, and cephalopods.

Explain the environmental importance of mollusks.

Characteristics of Mollusks

*Soft-bodied invertebrates with bilateral symmetry (usually one or two shells)

*Organs in a fluid filled cavity (visceral mass).

*Most live in water



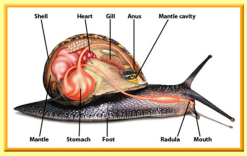
Ex. snails, clams, and squid.

Body Plan

*All have a mantle that covers the visceral mass.

*It secretes the protective covering (shell).

*Mantle cavity contains gills (between soft- body and mantle)



•The inside layer is the smoothest. It is usually the thickest layer because it's added to throughout the life of the mollusk.

*Open circulatory system in which blood surrounds and nourishes the organs.

*Well-developed head with a mouth and sensory organs.

*On the underside is a muscular foot used for movement.

Classification of Mollusks

*By the kind of shell and foot.



1. Gastropods

*Use a radula to obtain food, move by rhythmic contractions of the foot (gland secrete mucus trail).

*They either have one shell or no shell

•The largest group of mollusks, the gastropods, includes snails, conchs, abalones, whelks, sea slugs, and garden slugs.

2. Bivalves

*Hinged two part shell held together by strong muscles.

•Clams, oysters, and scallops are bivalve mollusks.

3. Cephalopods

*Large head with well developed nervous system and eyes, foot is divided into tentacles with suction cups or hooks to capture prey.

*Closed circulatory system

Cephalopod Propulsion

*water filled cavity between internal organs and outer muscular covering.

*contracts muscular covering and forces water out through and opening near the head

Value of Mollusks



*Jewelry, decoration, and food