

# Phylum Mollusca

## Second Largest Animal Phylum

Slugs, snails, oysters, clam, scallops,  
octopus, and squid



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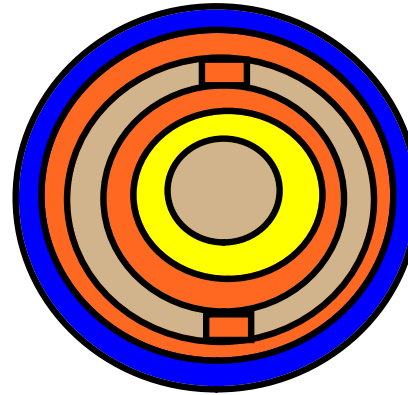
First group to have a true \_\_\_\_\_

Trochophore- larval stage shared by mollusks and \_\_\_\_\_

There are \_\_\_\_\_ classes of Mollusca

# Key Characteristics

1. \_\_\_\_\_ - a true coelom  
although it can be \_\_\_\_\_ in some animals  
like only surrounding the \_\_\_\_\_



## 2. Symmetry- most have bilateral symmetry



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### 3. Three-part Body Plan

a. Visceral Mass- a \_\_\_\_\_ section that contains the mollusk's \_\_\_\_\_

b. Mantle- a layer of heavy fold tissue that forms the \_\_\_\_\_ layer of the body

c. \_\_\_\_\_ - muscular region used for locomotion

4. Organ System- have \_\_\_\_\_ systems for excretion, \_\_\_\_\_, respiration, digestion, and reproduction

5. Shell- an \_\_\_\_\_ protecting the soft body



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6. Radula- all except bivalves have these, a  
\_\_\_\_\_ tongue like organ, has  
thousands of pointed back \_\_\_\_\_ in rows  
the teeth scrape

# Organ Systems

Only coelomates without \_\_\_\_\_  
bodies, \_\_\_\_\_ - \_\_\_\_\_ digestive system

Excretion- use their coelomates as a  
\_\_\_\_\_ place for body fluids

Beating \_\_\_\_\_ pulls the \_\_\_\_\_ into tiny  
tube structures (nephridia).

The Nephridia recover \_\_\_\_\_ molecules  
and the rest leaves through a \_\_\_\_\_ in the  
\_\_\_\_\_

Circulation- three chambered \_\_\_\_\_ and  
\_\_\_\_\_ circulatory system

Octopus and Squid have a \_\_\_\_\_  
circulatory system

Respiration-Most use \_\_\_\_\_, terrestrial snails have a primitive \_\_\_\_\_ like membrane

Reproduction- Most have distinct males and females, some \_\_\_\_\_ and slugs are hermaphrodites, some \_\_\_\_\_ and sea slugs can \_\_\_\_\_ from one sex to another and back again

# Class Gastropods

Snails and Slugs

Size microscopic- 1 meter

Some have shells some do not



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Many are \_\_\_\_\_ that scrape with their \_\_\_\_\_

Some slugs are \_\_\_\_\_, some attack other \_\_\_\_\_ by making a hole in the \_\_\_\_\_ and suck out the \_\_\_\_\_

## Class Bivalves

Most are marine but some are

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Oysters, mussels, and clams

All bivalves have a \_\_\_\_\_ part hinged

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Abductor muscles- two thick \_\_\_\_\_  
that connect the valves

Do not have a distinct \_\_\_\_\_ or radula

A small nerve ganglion like \_\_\_\_\_

Have sensory cells that respond to  
\_\_\_\_\_ and touch

Most reproduce by \_\_\_\_\_ sperm or  
egg into the water

Filter \_\_\_\_\_ animals

Siphons- hollow tube used for sucking  
in and \_\_\_\_\_ water

Oyster makes pearls- \_\_\_\_\_ is covered  
by a thin sheet of nachre



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## Class Cephalopods

Squids, cuttlefish, nautiludes

A large head with \_\_\_\_\_ attached

The tentacles have either suction cups  
or \_\_\_\_\_ for seizing \_\_\_\_\_

The most intelligent  
of all invertebrates



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Complex \_\_\_\_\_ system and a well-developed brains

Capable exhibiting \_\_\_\_\_ behavior

Octopuses can be trained to distinguished between classes of \_\_\_\_\_ like square and cross

Some species have \_\_\_\_\_ vision

The eyes of some giant squid can be 40 cm long.

Squid and octopuses can release a dark \_\_\_\_\_ to hide the direction of their escape

They are Predators