

# Phylum Mollusca

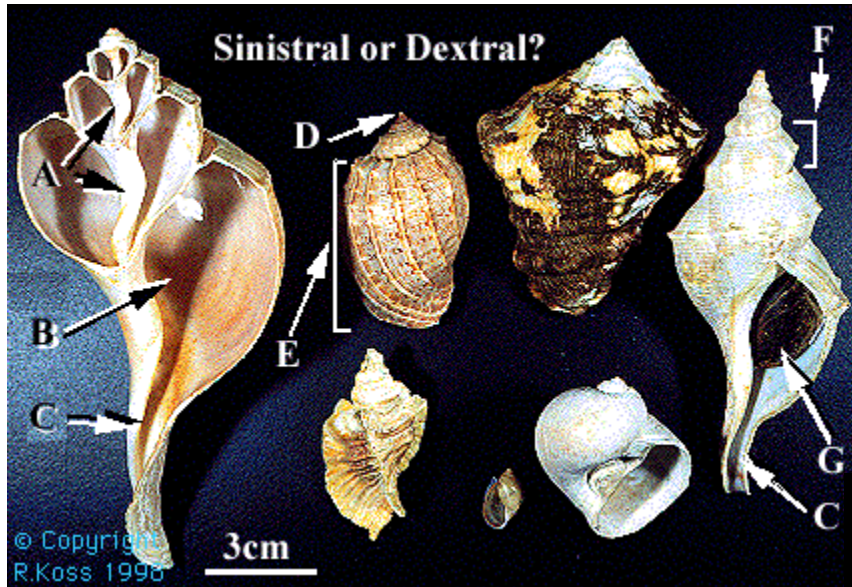
2<sup>nd</sup> largest phylum

=soft-bodied, animals usually have a calcified shell

4 classes:

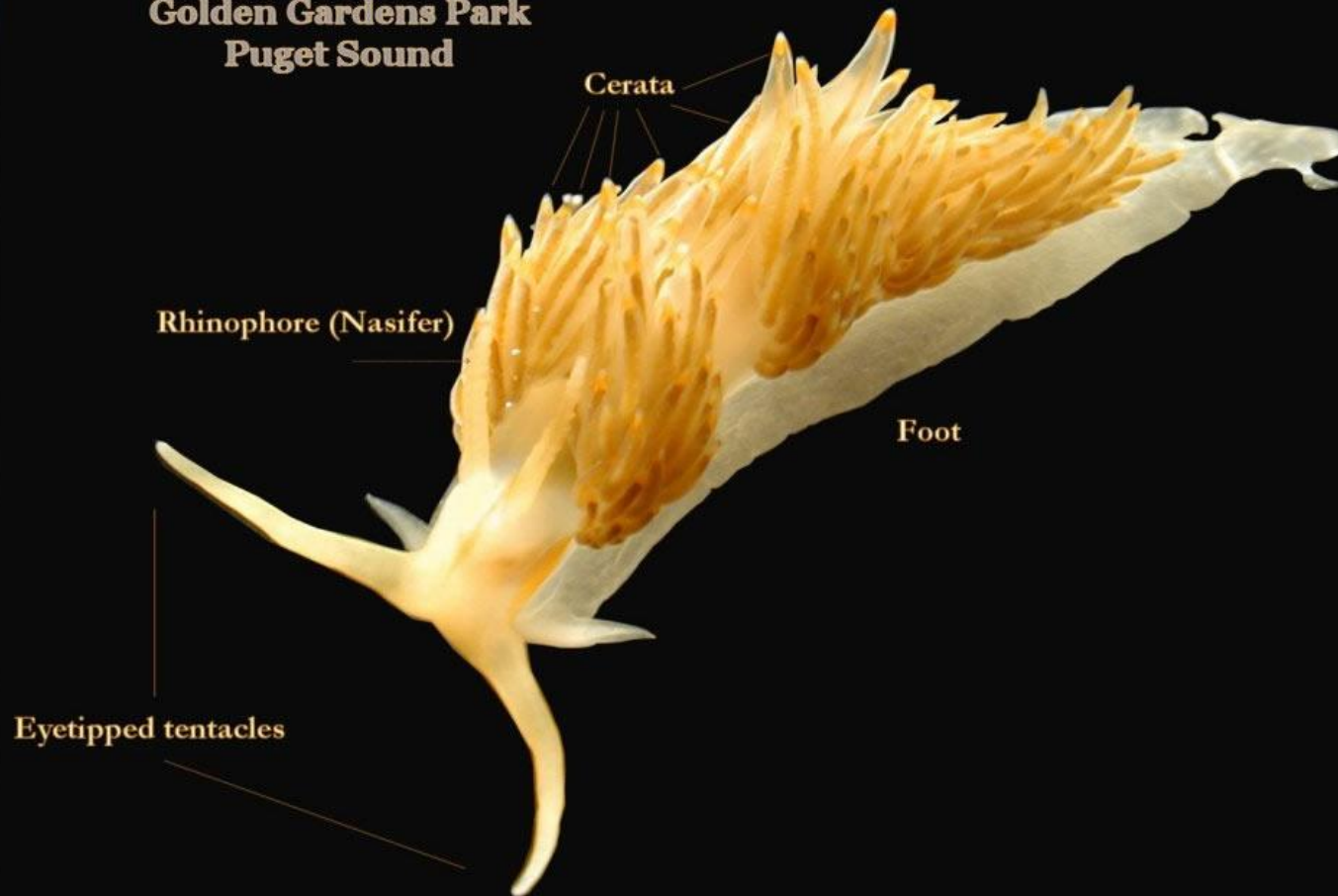
gastropoda, bivalvia, polyplacophora,  
cephalopoda

# Gastropods



# Æolid Nudibranch

Golden Gardens Park  
Puget Sound

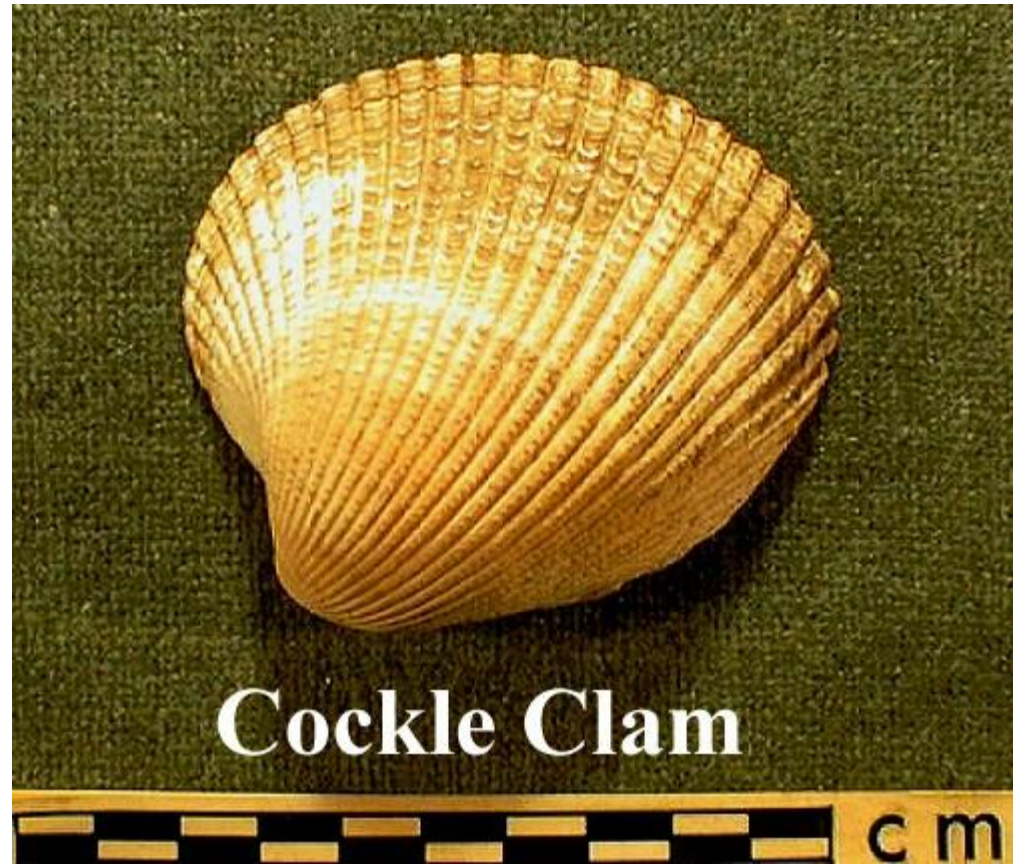


# Polyplacophora - Chitons





# Bivalvia

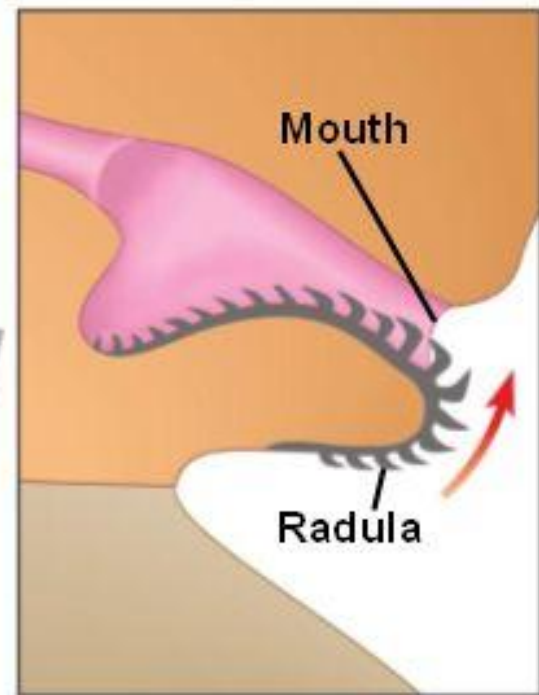
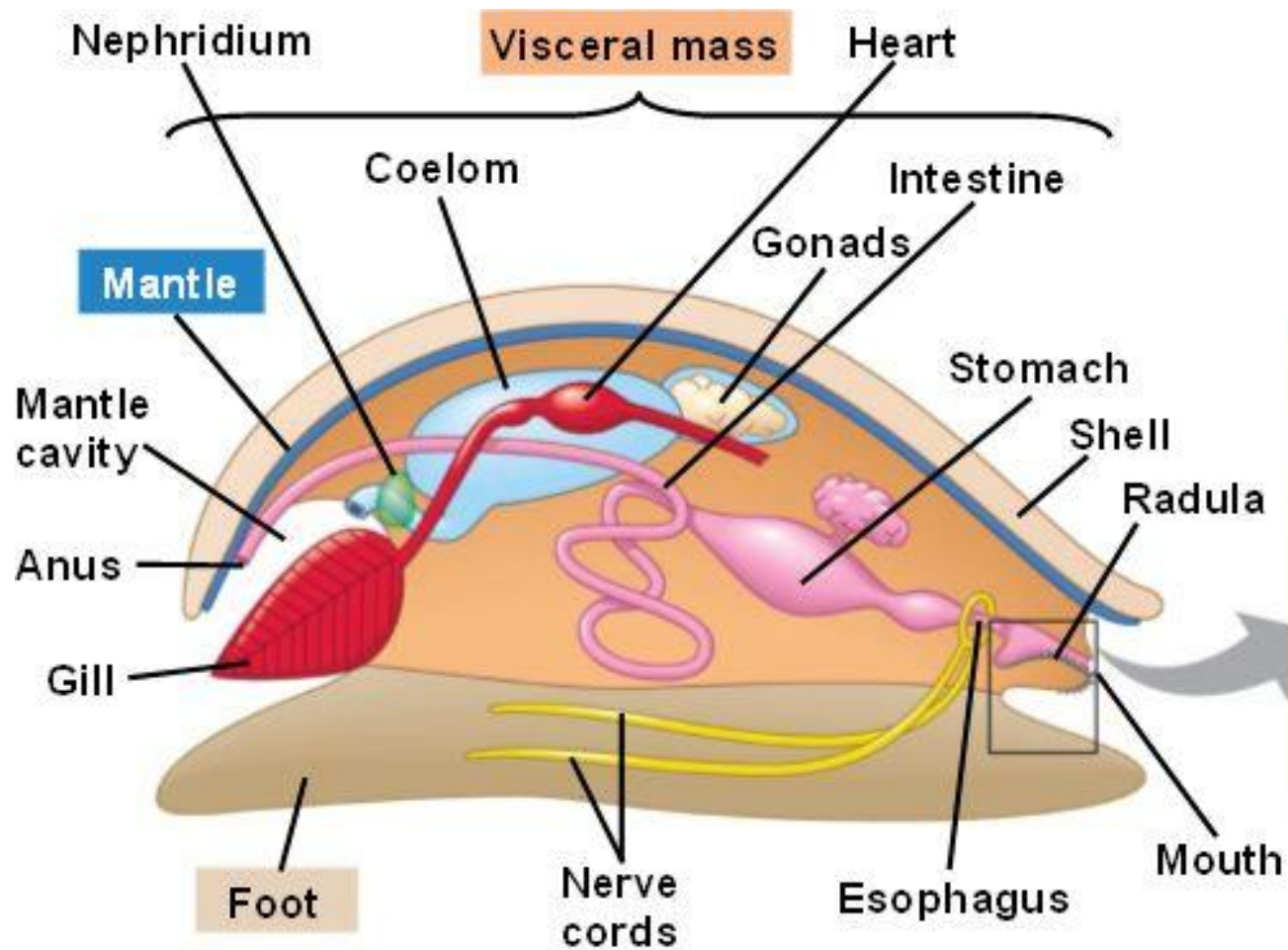


# Cephalopoda









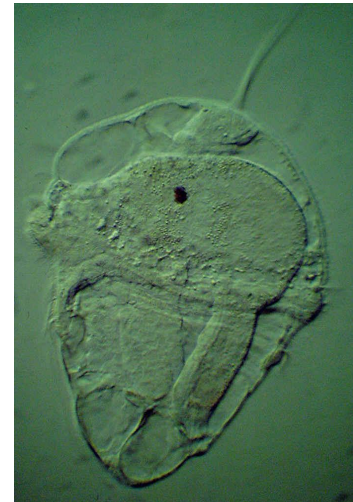
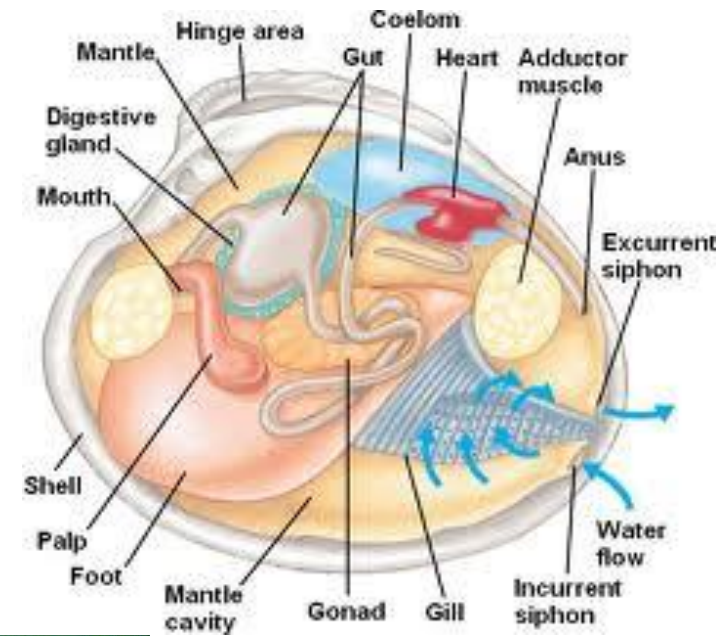
## Characteristics of Phylum Mollusca:

- Body type: bilateral
- Ecological roles:
  - Food source
  - Predators - control populations
- Body organization:  
3 layers – endoderm, mesoderm, ectoderm
- Body cavity: coelom

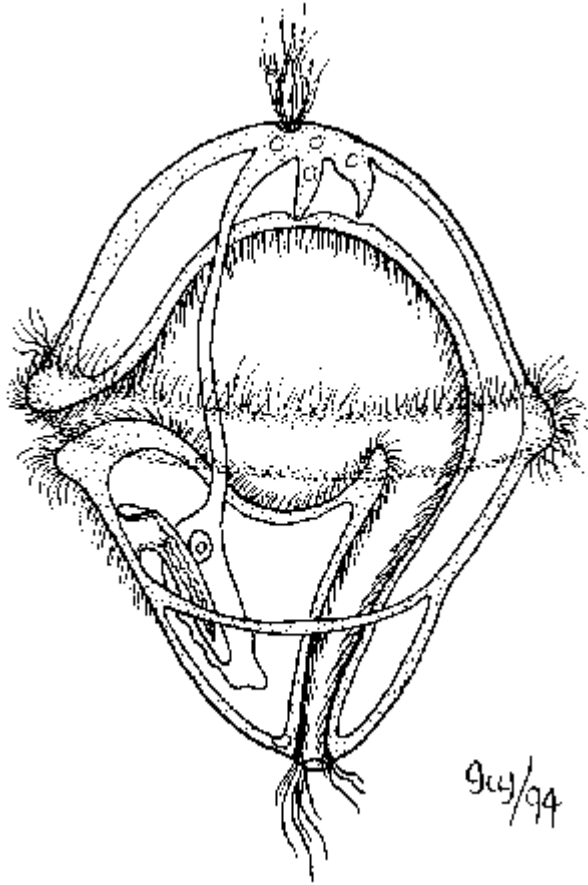


## Characteristics continued:

- Digestive system:  
**Complete** – mouth & anus
  - Radula (rasping tongue)
  - Filter feeding (bivalves)
- Reproduction: trochophore larvae
  - Sexual: dioecious or hermaphroditic (gastropods)
  - Asexual: regeneration for some

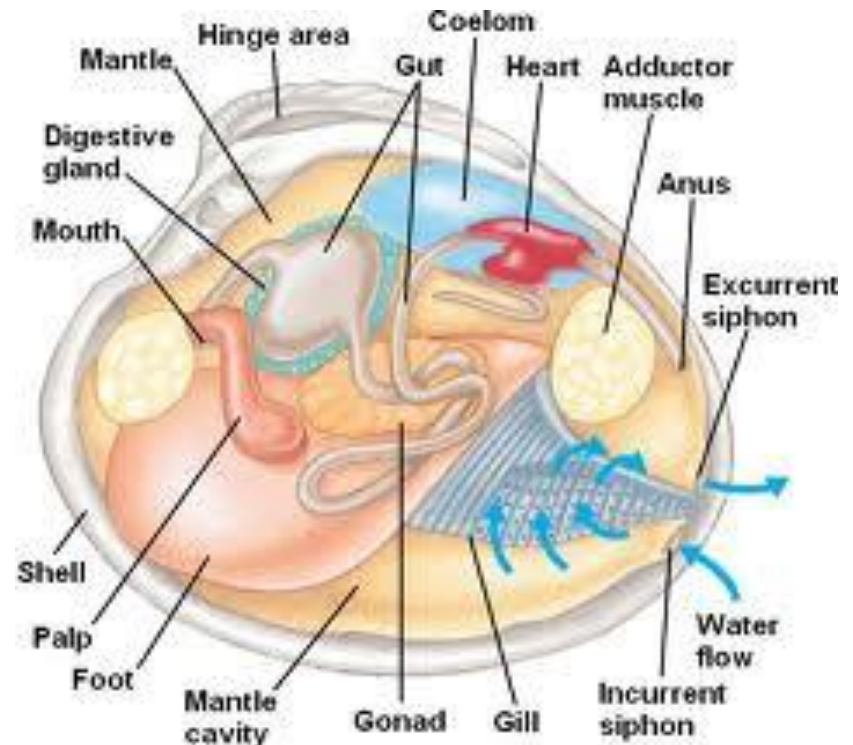
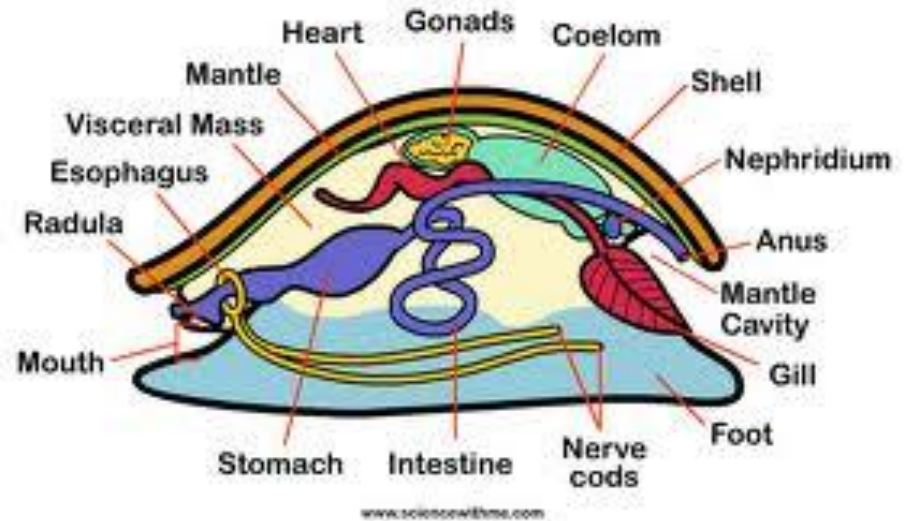


# Trochophore Larva



## Characteristics continued:

- Circulation:
  - **Open** = gastropoda, bivalves, polyplacophora
  - **Closed** = cephalopods
- Nervous system:
  - Cephalopods – brain & nerves
  - Bivalves & polyplacophora have nerves
  - Light receptors



## Characteristics continued:

- Respiration:
  - Aquatic: gills
  - Land: special mantle
- Excretion: nephridia & anus
- Habitat:
  - mainly in the water
  - some on land = snail & slug

