

GASTROPODS

What are gastropods?



GASTROPODS

- Mollusks - soft bodied organisms with bilateral symmetry that are composed of a head, foot and a coiled visceral mass



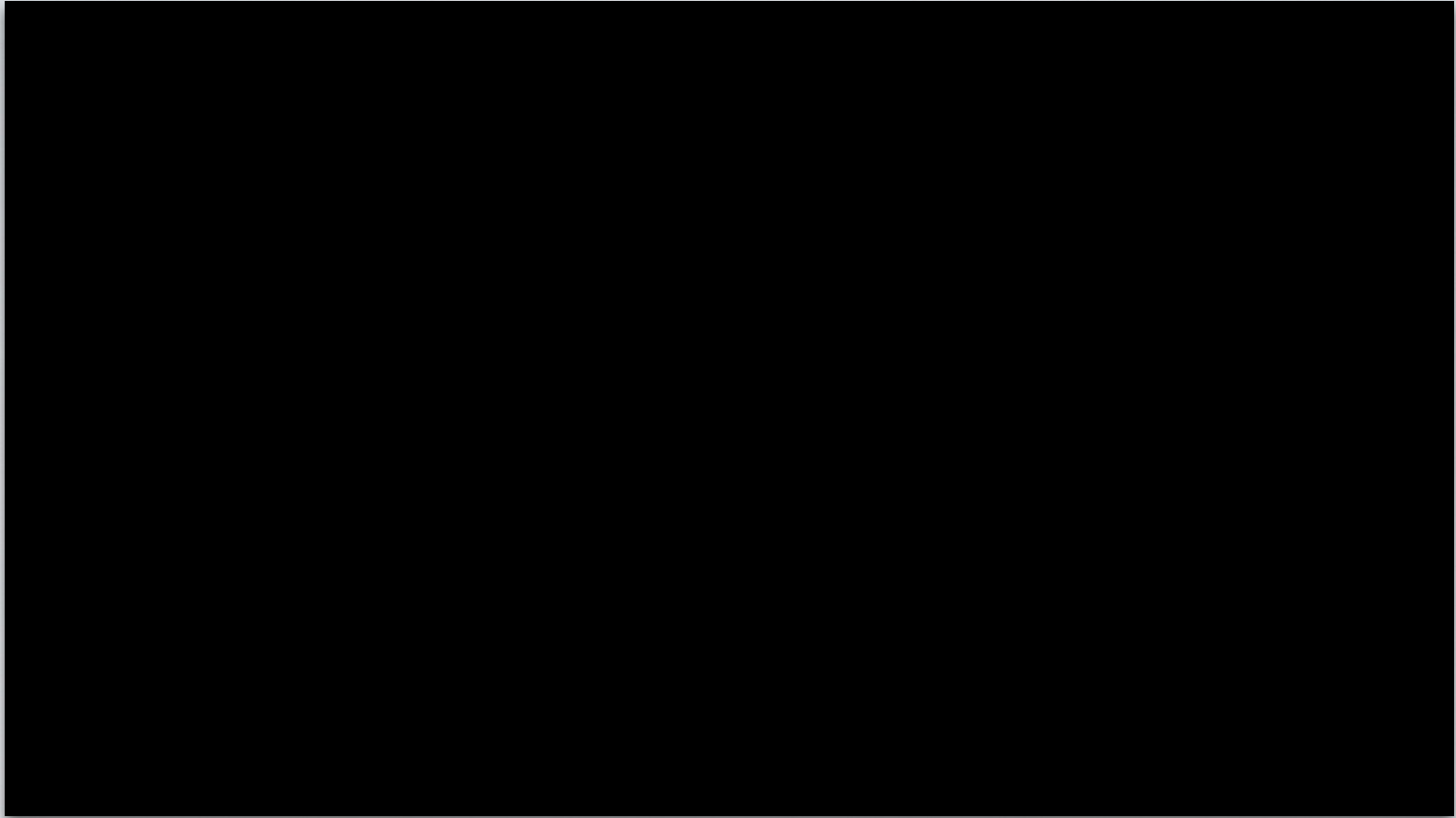
Gastropods



Bivalves



Cephalopods



Gastropods

GASTROPODS

- Gastropods - diverse group of mollusks that consists of snail, slug, or whelk
 - 2/3 of all mollusks
 - Gastropods meaning “stomach-foot”
 - Univalves - one shell



GASTROPODS

- Gastropod Characteristics:
 - Locomotion through a large muscular foot
 - One way digestive tract
 - Open circulatory system consisting of a one chamber heart and tiny blood vessels



GASTROPODS

- Gastropod Characteristics: (continued)
 - Colorless blood
 - Kidneys excrete cellular waste



GASTROPODS

- Gastropod Characteristics: (continued)
 - Snails breathe using a siphon tube
 - Oxygenated water is taken in via the siphon tube
 - Gills remove the O_2
 - CO_2 is released



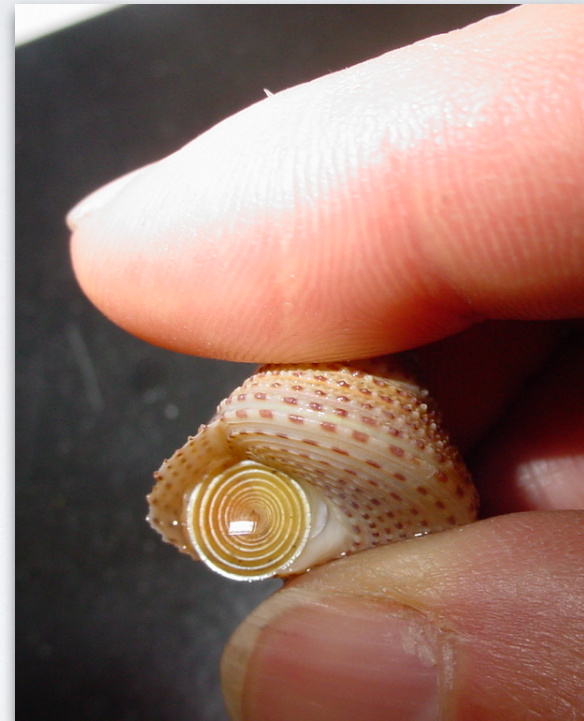
GASTROPODS

- Gastropod Characteristics: (continued)
 - Anterior tentacles are receptors for sensations and touch
 - Posterior tentacles a.k.a. eye stalks



GASTROPODS

- Gastropod Characteristics: (continued)
 - Operculum- thick pad of tissue that closes like a trapdoor over the foot and protects the snail
 - Usually made of protein
 - Some are calcified (CaCO_3)

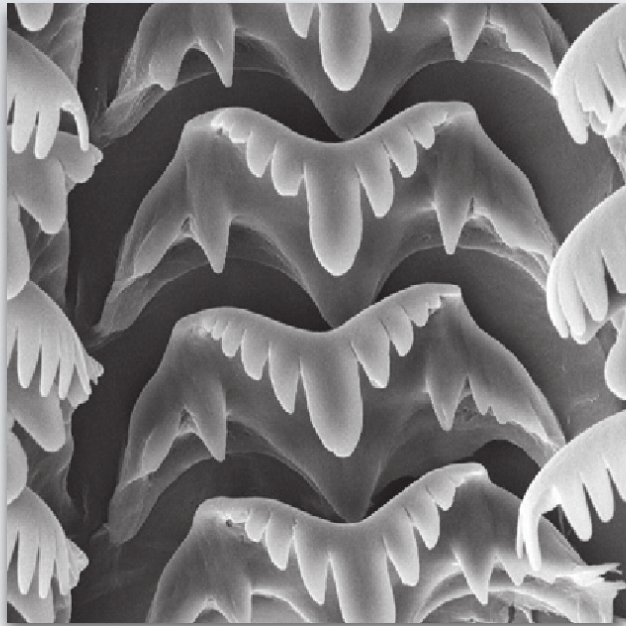


GASTROPODS

- Gastropod Characteristics: (continued)
 - Adapted to crawl or climb for food
 - Many different species of snails are adapted to eat a variety of food including: plants, dead organisms, or live prey

GASTROPODS

- Gastropod Feeding:
 - Adapted to crawl or climb for food
 - Many different species of snails are adapted to eat a variety of food including: plants, dead organisms, or live prey
 - Feed on dead or dying organisms use their radula to tear and shred dead matter into consumable pieces
 - Radula- ribbon like tooth for scraping off and ingesting algae



Gastropod Feeding

GASTROPODS

- Gastropod Feeding: (continued)
 - The Moon Snail feeds on live clams by secreting chemicals from the foot to soften the clamshell then inserts its mouth and eats the clam from the inside



Moon Snail

GASTROPODS

- Gastropod Feeding: (continued)
 - The Cone Snail a harpoon like radula that they use to spear prey and inject toxins



Cone Snail

GASTROPODS

- Gastropod Reproduction:
 - Some snail species have separate sexes, but most are gastropods are hermaphrodites
 - Fertilization is internal and development is external
 - Fertilized eggs may be deposited directly into the water or can be deposited in egg cases



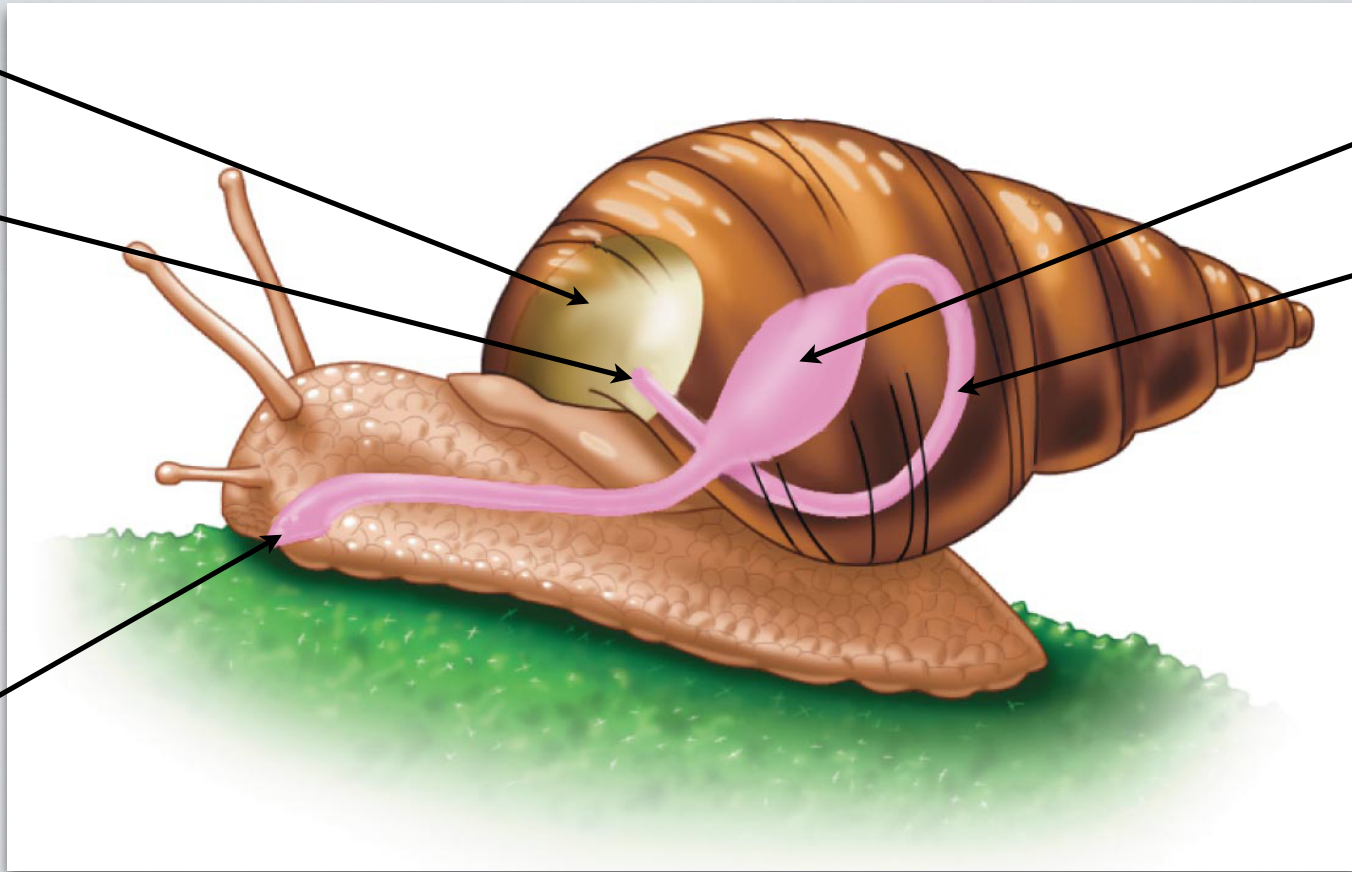


Cone Snail

Mantle
Cavity

Anus

Mouth



Stomach

Intestine

Gastropods Anatomy