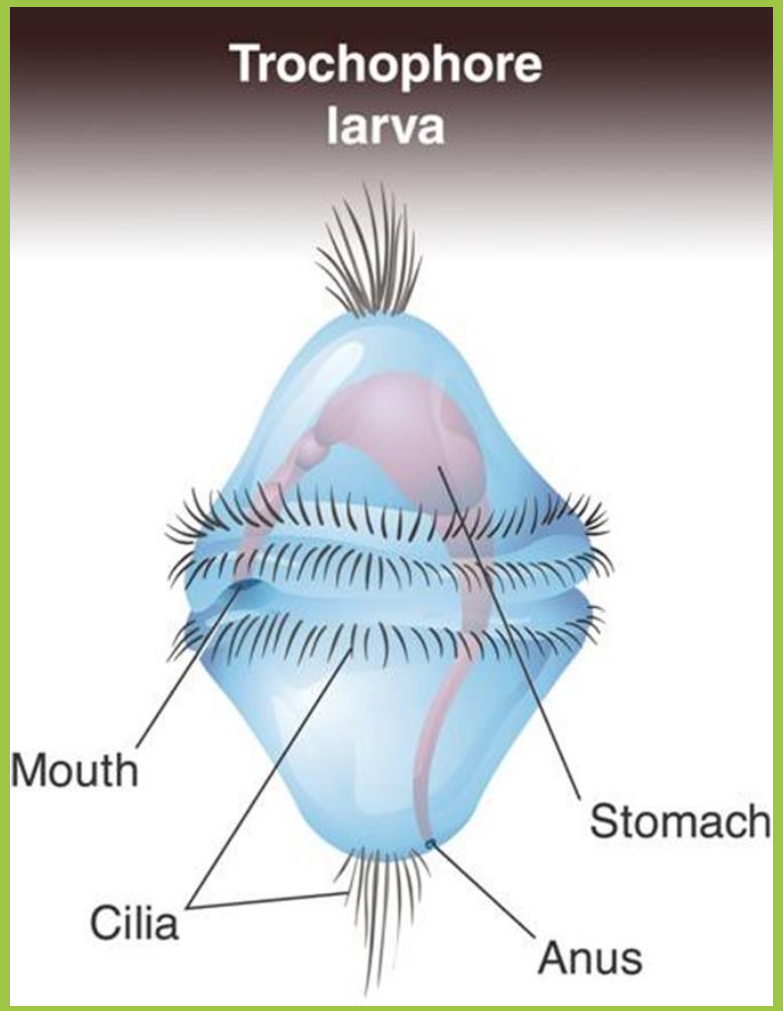
MOLLUSKS

- One of the oldest and most diverse phyla
  vary in size, shape and form
  - Include : Snails, slugs, clams, squids & octopi
- Soft bodied
- Internal or external shell
- Share similar developmental stages
- True Coelom
- Complex interrelated organ systems
  - Function together

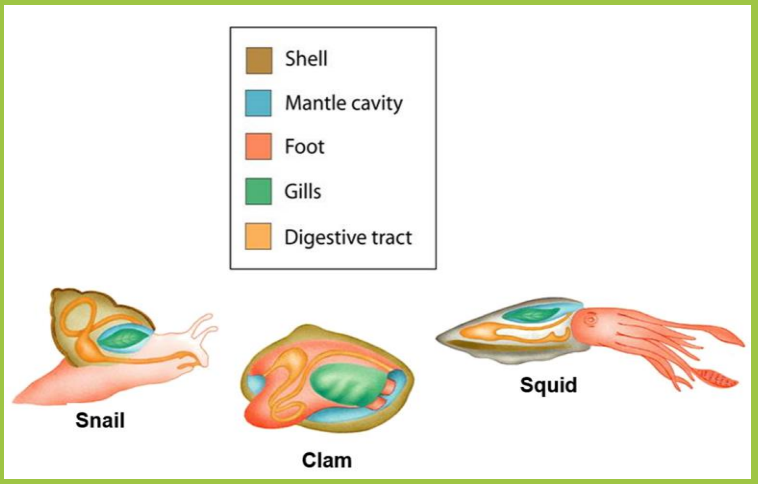
DEVELOPMENT

- Free swimming larval stage
  - Trochophore
    - Also characteristic of annelids
      - Shows relation
        - Shared a common anscestor 550 mya



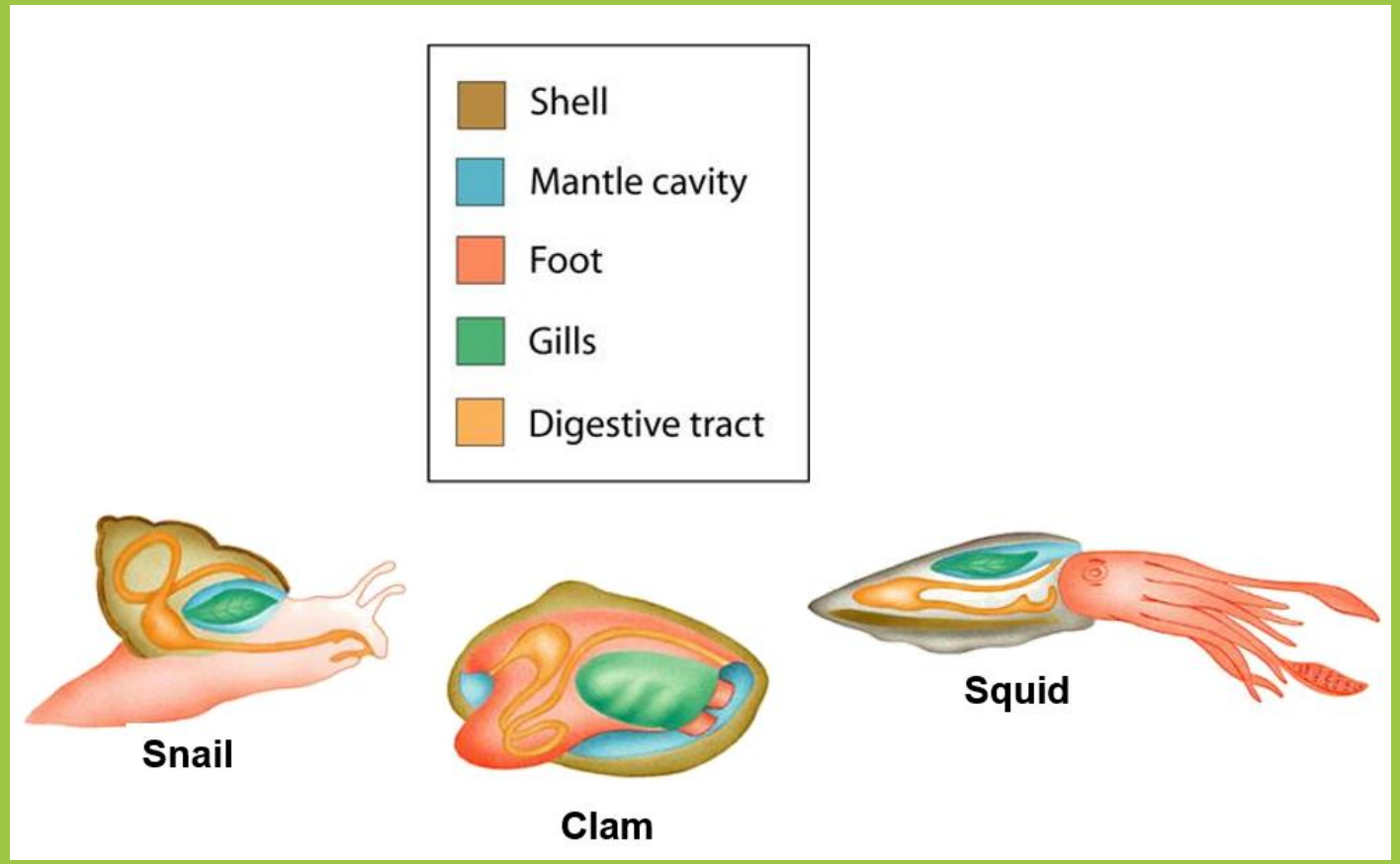
FORM AND FUNCTION

- Body plan
  - The body plan of most mollusks has four parts: foot, mantle, shell, and visceral mass.
    - Foot: takes many forms
    - Mantle
      - Thin layer of tissue covering most of the mollusks body
    - Shell
      - Made by glands in the mantle that secrete calcium carbonate
      - Has been reduced or lost in some mollusk groups (slugs)
    - Visceral mass
      - Below mantle, contains internal organs



BODY PLAN

- The muscular foot takes many forms
  - flat structures for crawling
  - spade-shaped structures for burrowing
  - tentacles for capturing prey

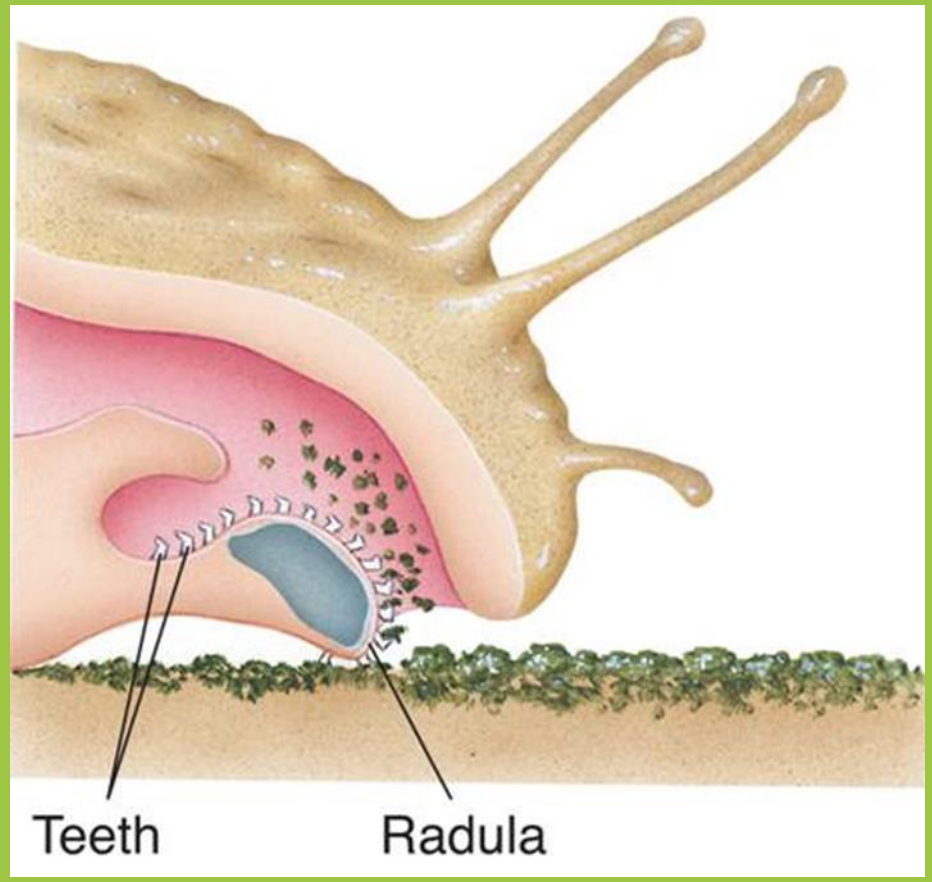


FEEDING

- Mollusks can be
  - Herbivores
  - Carnivores
  - Filter feeders
  - Detritivore
  - Parasites

FEEDING

- Snails and slugs feed using a flexible, tongue-shaped structure known as a radula.
  - Hundreds of tiny teeth are attached to the radula.
- The radula is used to scrape algae off rocks or to eat the soft tissues of plants.
- Carnivorous mollusks use their radula to drill through shells to get at soft tissue



- Use sharp jaws
  - Octopi and certain sea slugs
- Feathery gills
  - Food is carried by water
    - Enters incurrent siphon
      - Tubelike structure in which water enters the body
    - The water flows over the gills and leaves by the excurrent siphon.
      - Clams oysters and scallops