- A clitellum is a band of thickened, specialized segments.
  - Secrete a mucus ring into which egg and sperm are released
- After eggs are fertilized in the ring, the ring slips off the worm's body and forms a protective cocoon.
  - Young worms hatch weeks later

GROUPS OF ANNELIDS

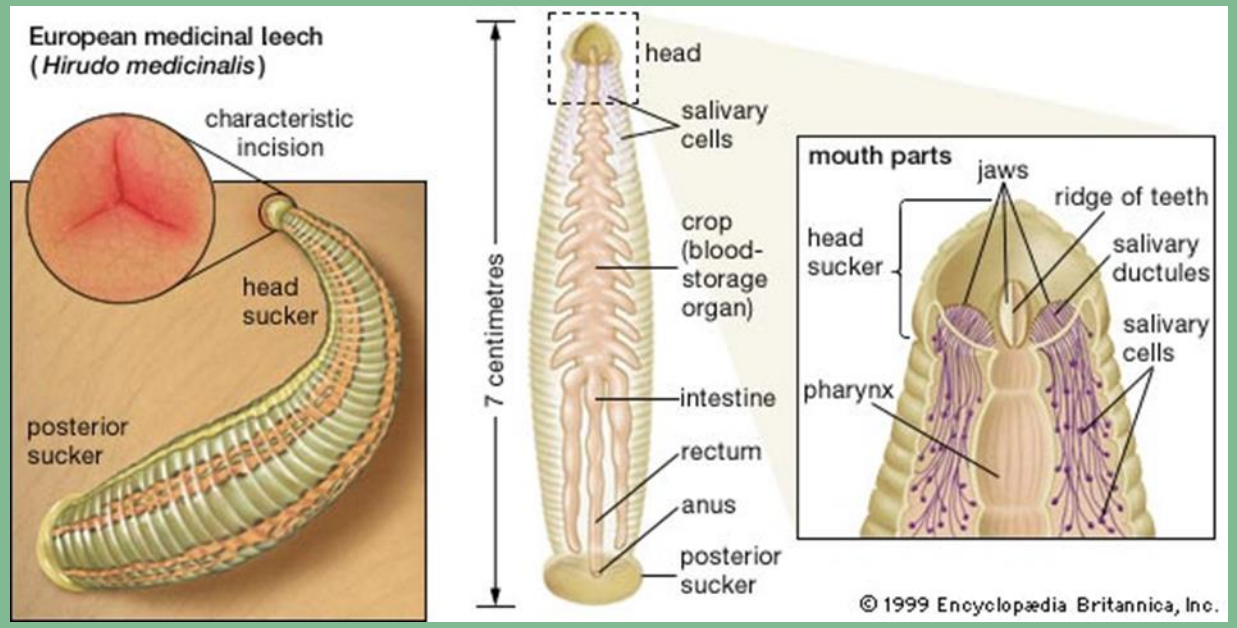
- Annelids are divided into three classes
  - Oligochaetes
  - Leeches
  - Polychaetes

CLASS OLIGOCHAETA

- Earthworms and their relatives
- Typically have streamlined bodies
- Relatively few setae compared to polychaetes
- Most oligochaetes live in soil or fresh water.
- Giant Earthworm

CLASS HIRUDINEA

- The class Hirudinea contains the leeches.
- Leeches are typically external parasites that suck the blood and body fluids of their host
- Powerful suckers at each end
- Uses pharynx to suck blood
- Some release anesthesia so prey do not know they have been bit
- Also release substances to prevent blood clotting

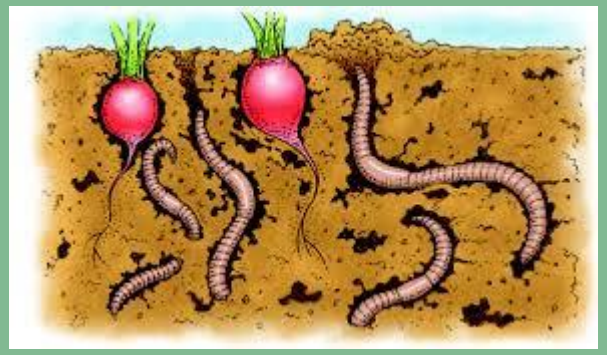


USE OF LEECHES IN MEDICINE

CLASS POLYCHAETA "MANY BRISTLES"

- Marine annelids that have paired, paddlelike appendages(parapodia) tipped with setae.
- The setae are brush like structures on the worm.
- Found most commonly in crevices in coral reefs, sand, mud and rocks
- Feather duster worm
- More

ECOLOGY OF ANNELIDS



- Earthworms
  - "Intestines of the Earth"
  - Burrow through the soil
    - Aerate it, mixing it to depths of 2 m
  - Create tunnels
    - Provide passageway for plant roots, water and beneficial bacteria
    - Pull plant material down in the soil
- Earthworm castings (feces)
  - As earthworms pass soil through gut they grind it, digest it and mix it with bacteria
  - Bring nutrients from deeper to shallow soil
    - Nitrogen, phosphorous, potassium, micronutrients and beneficial bacteria