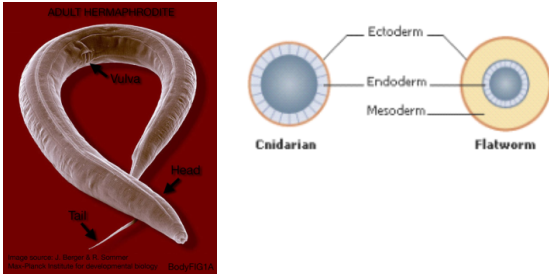


Nematoda (Roundworms) p. 689

- Have a **pseudocoelom**, or "false coelom"; not a true fluid-filled, tissue-lined coelom
- Digestive tract has two openings - mouth and anus
- Body plan: "tube within a tube"



Apr 24-6:36 PM

Feeding

- Many free-living forms are predators with grasping mouth parts to catch and eat small animals.
- Other eat decaying matter, and several types are parasitic and cause disease in humans.



Apr 24-6:50 PM

Respiration, Circulation & Excretion

- rely on diffusion; no internal transport

Response

- simple nervous system with several ganglia
- nerves transmit sensory information and control movement

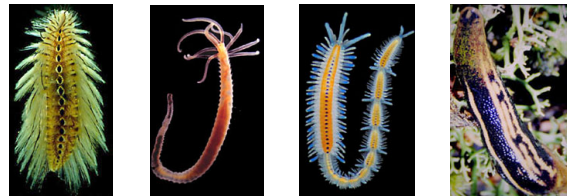
Reproduction

- Sexual: most species have separate sexes
- **Internal fertilization**: male deposits sperm inside female

Apr 24-6:51 PM

Annelida (Segmented Worms)

- Ringlike appearance, or "segmented" body parts
- Segments separated by **septa**
- Many have bristles, or **setae**, attached to each segment
- Have a true **coelom** that is lined with tissue came from mesoderm (middle layer)



Apr 24-6:56 PM

Feeding

- Many use a **pharynx**; some have sharp jaws to attack prey.
- **Earthworms**: pharynx pumps food and soil into a tube called the **esophagus**.
- Food enters the **crop** where it is stored, and then through the **gizzard**, where it is ground into small pieces



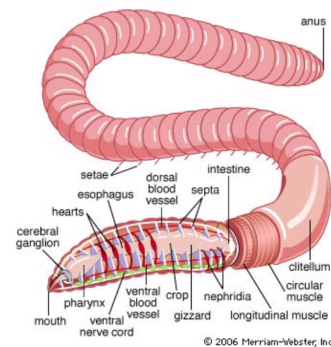
Apr 24-6:59 PM

Circulation

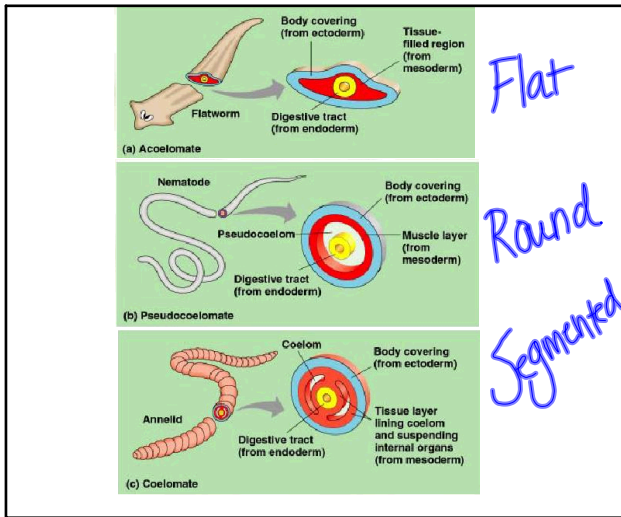
- **Closed circulatory system**: blood is contained within a network of blood vessels

Respiration

- Aquatic annelids have gills
- Earthworms take in oxygen and release carbon dioxide through their moist skin



Apr 24-7:02 PM



Apr 24-7:05 PM

Reproduction

P. 696

- Most reproduce sexually.
- Two worms attach to each other, exchange sperm, then store it.
- When eggs are ready, the clitellum secretes a mucous ring into which eggs and sperm are released and fertilization takes place.
- The ring slips off the worm and forms a protective cocoon from which young worms hatch weeks later.

Apr 28-11:12 AM