

May 25, 2011

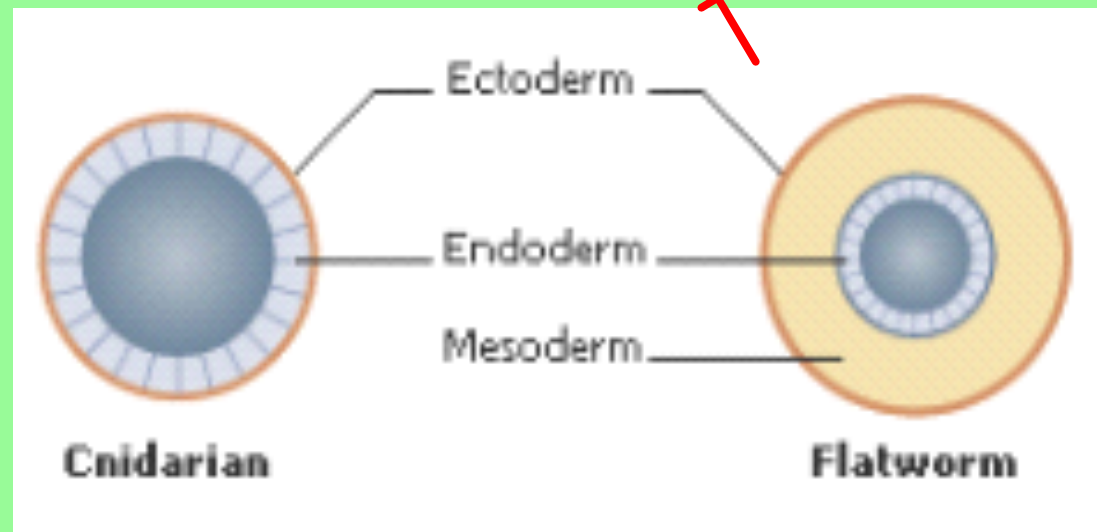
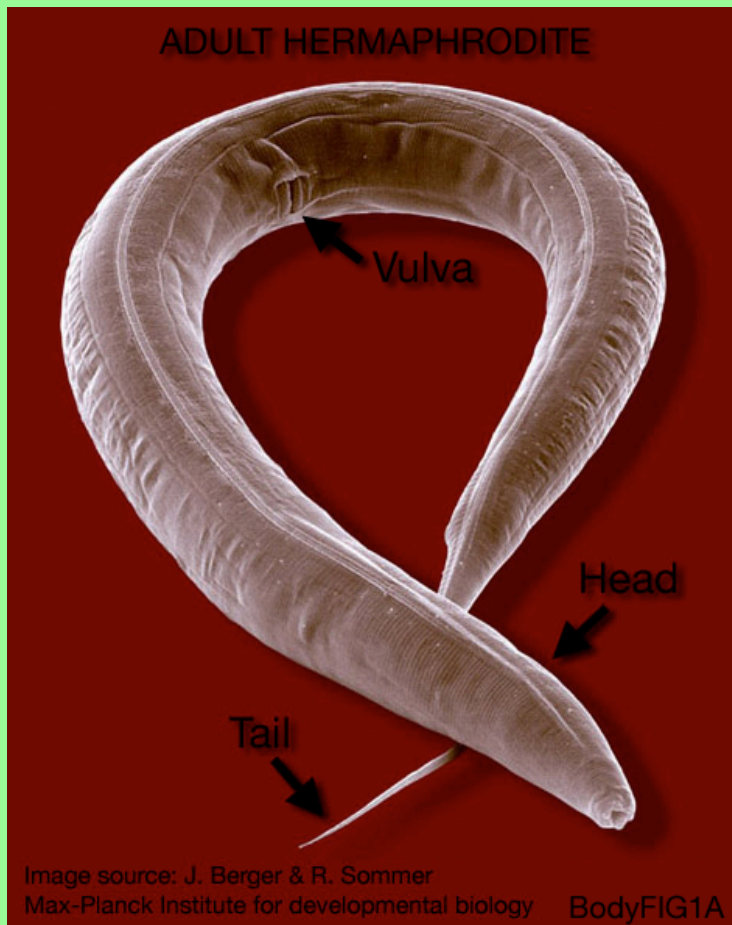
- 1) Roundworms and Annelids
- 2) Questions



Nematoda (Roundworms)

- 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"

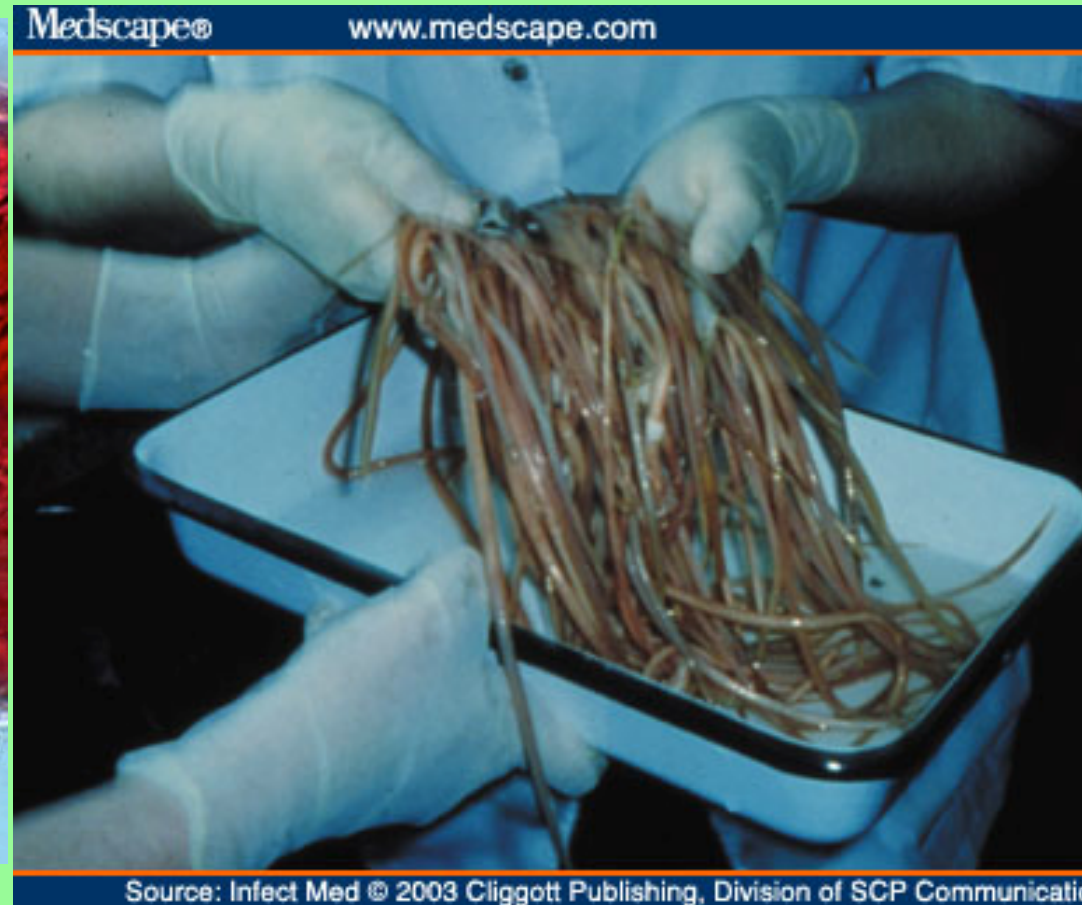
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Feeding

<http://www.youtube.com/watch?v=dB0cL3PcYZI>

- 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.



Source: Infect Med © 2003 Cliggett Publishing, Division of SCP Communicati

Respiration, Circulation & Excretion

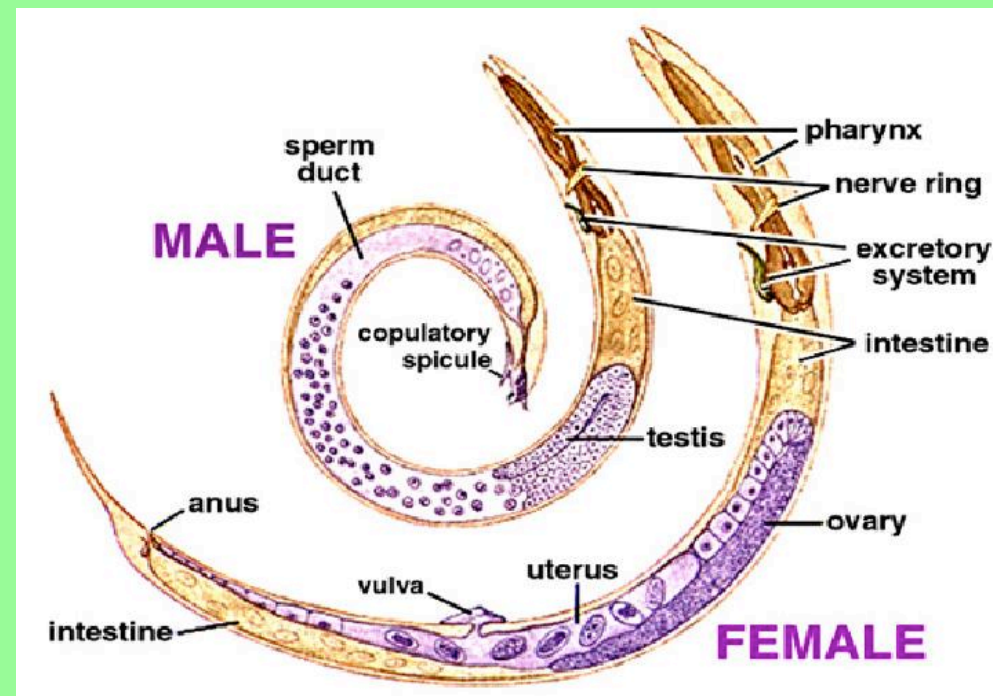
- rely on diffusion; no internal transport

Response

- simple nervous system with several ganglia

Reproduction

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



Annelida (Segmented Worms)



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



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

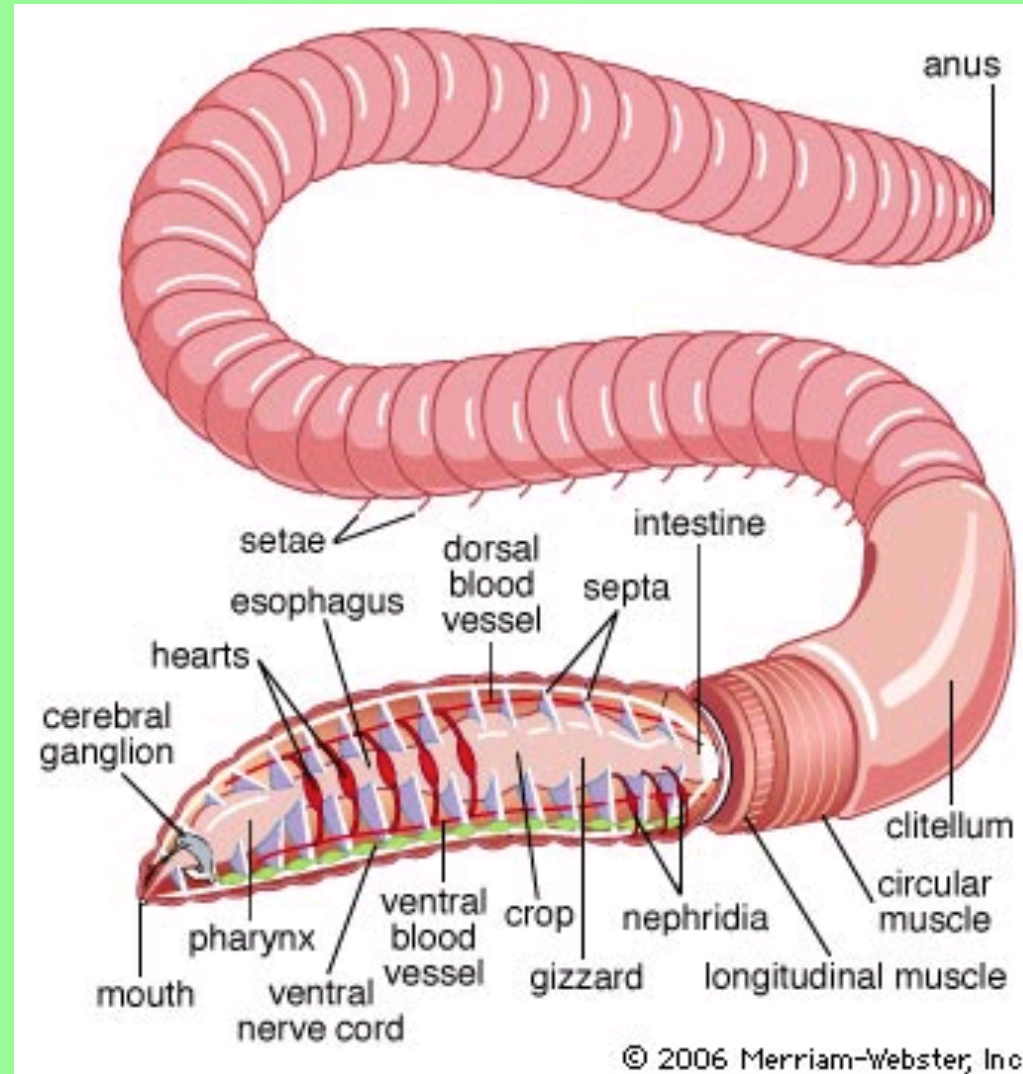


Circulation

- 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



Reproduction in Earthworms

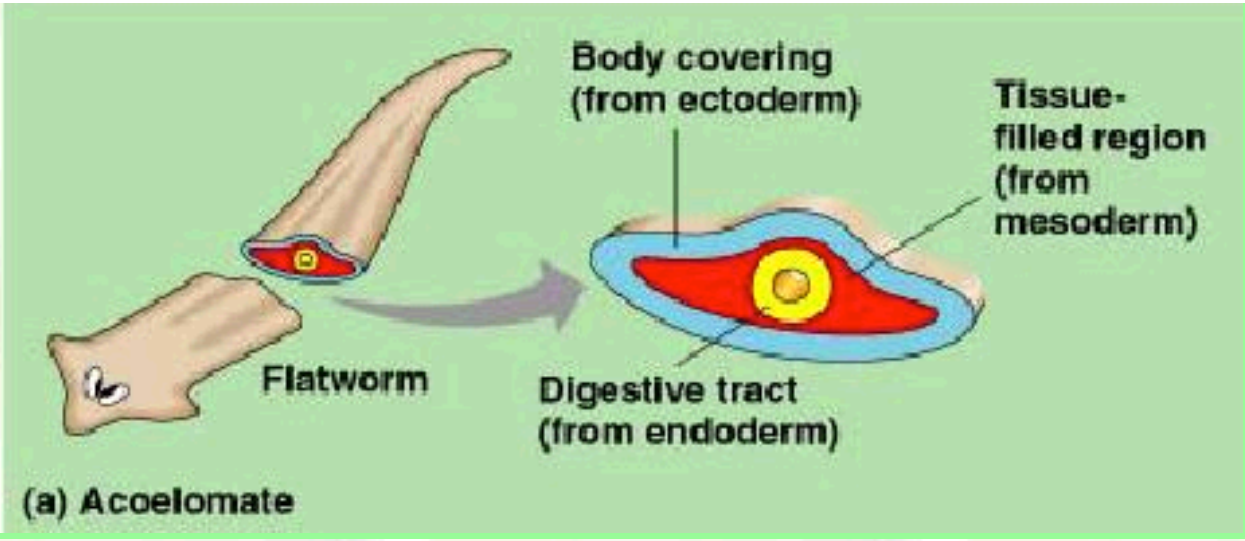
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- Most reproduce sexually.
- Two worms attach to each other, exchange sperm, then store it.
- When eggs are ready, the clitellum secretes a mucous ring into which eggs and sperm are released and fertilization takes place.
- The ring slips off the worm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

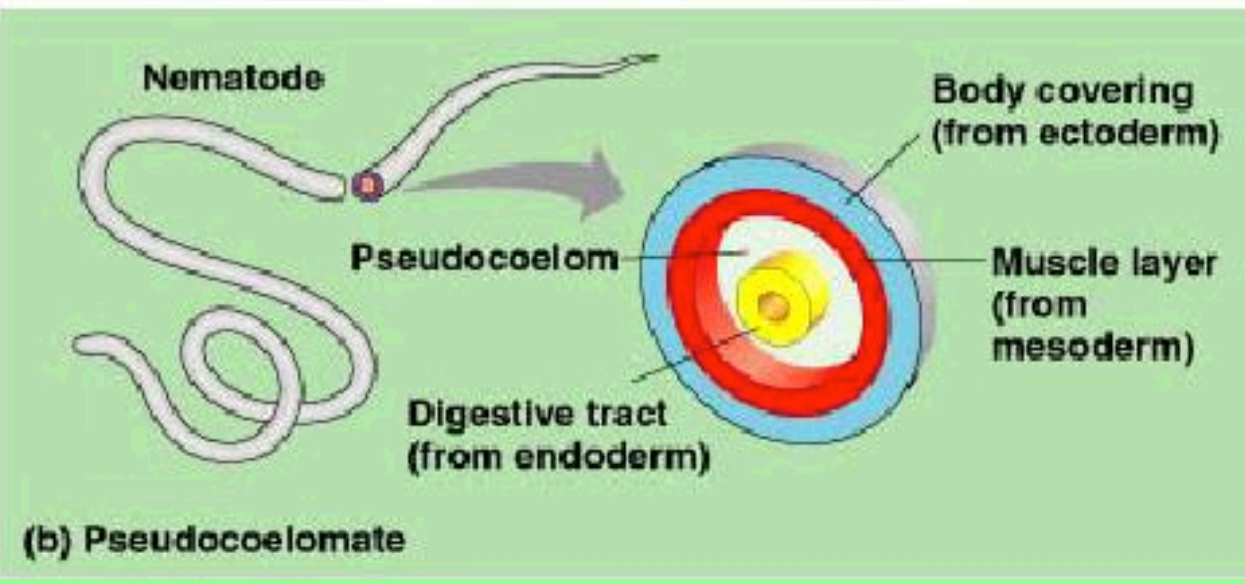


<http://www.youtube.com/watch?v=C1M9Ey-UMFU>

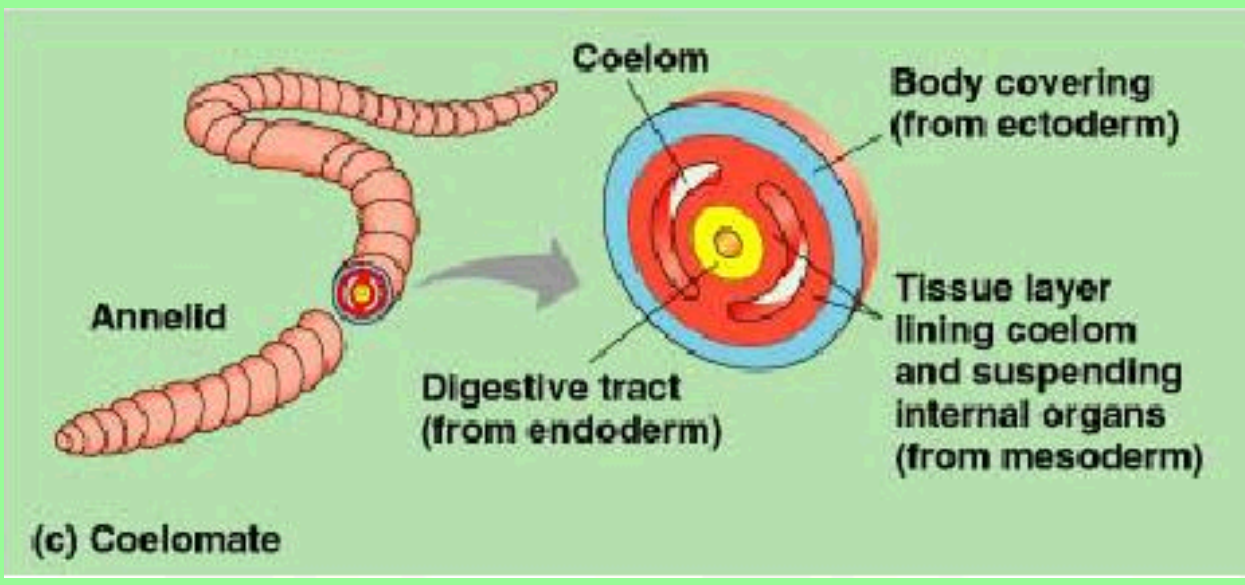




Flat



Round



Segmented

Did You Know?

- . The **Guinea worm** can burrow through the skin and must be extracted very slowly over several weeks.
- . **Hookworms** can burrow through the foot, and make their way to your lungs, and then your stomach and intestines.
- . **Pinworm infections** are common in children who eat or play in contaminated soil and food. The worms crawl out through the anus at night to lay their eggs and cause intense itching.
- . Raw or undercooked meat (especially pork) can contain **Trichinella worms**, which can spread throughout the body.

<http://www.youtube.com/watch?v=GiHtUFuGgSA&feature=related>

Pinworm infections

Guinea worm



Hookworm larvae tracks



Filarial worms causes elephantiasis

Trichinella worms



Ascarid Worms



Complete the following:

- 1) Sponge Study Questions
- 2) Sponges and Cnidarians Review- do not do #9
- 3) Page 675 1-6
- 4) Page 679 1-10 MC
- 5) Page 693 1,2,3,4,5
- 6) 1, 2,

Read p. 689-696

p. 693 # 1, 2, 4 Roundworms

p. 699 # 1, 3, 4 Annelids

