

May 24, 2011

- 1) Start Worms- Flatworms
- 2) Questions- Sponges and Cnidarians



Three major groups of worms:

- 1) Flatworms (*Platyhelminthes*)
- 2) Roundworms (*Nematoda*)
- 3) Segmented Worms (*Annelida*)

Platyhelminthes

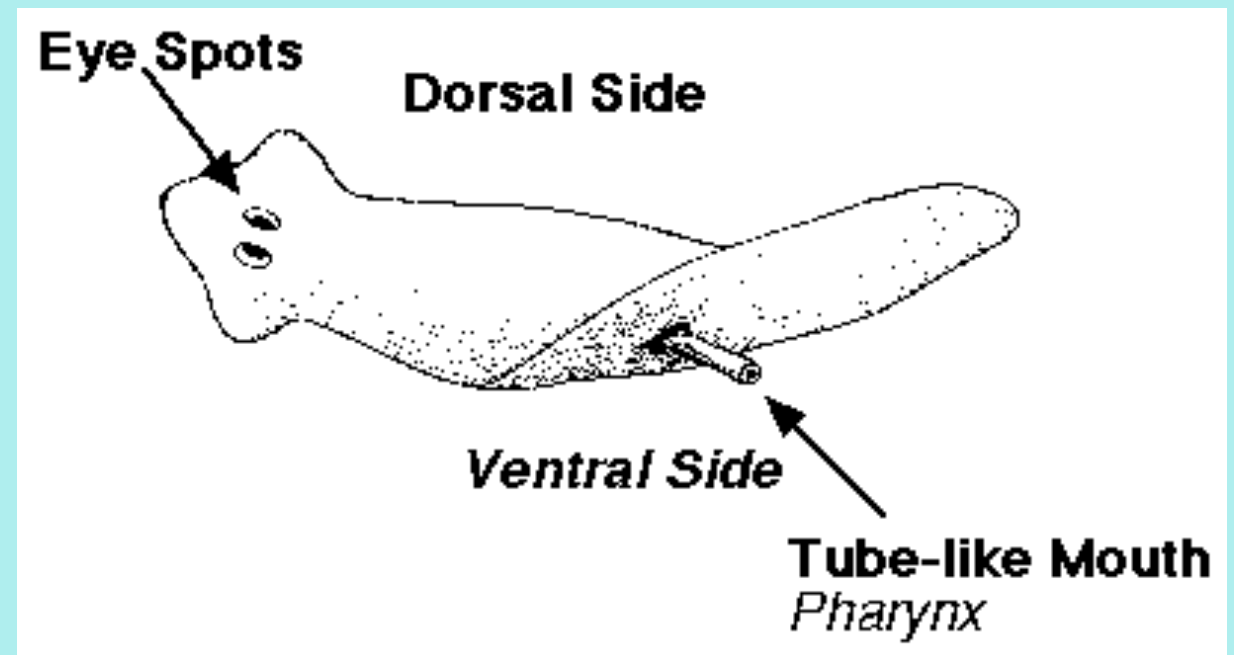
(Platy-flat helminthes-worm ie Flatworms)

- Flatworms : have tissues and internal organ systems.
- Flatworms are acoelomates (no coelom: fluid-filled body cavity)
- They have right and left sides, and most have enough cephalization to have what is called a head.



Feeding

- Digestive cavity with a single opening through which both food and wastes pass.
- Pharynx: muscular tube near the mouth which is extended to pump food to the gut



planaria

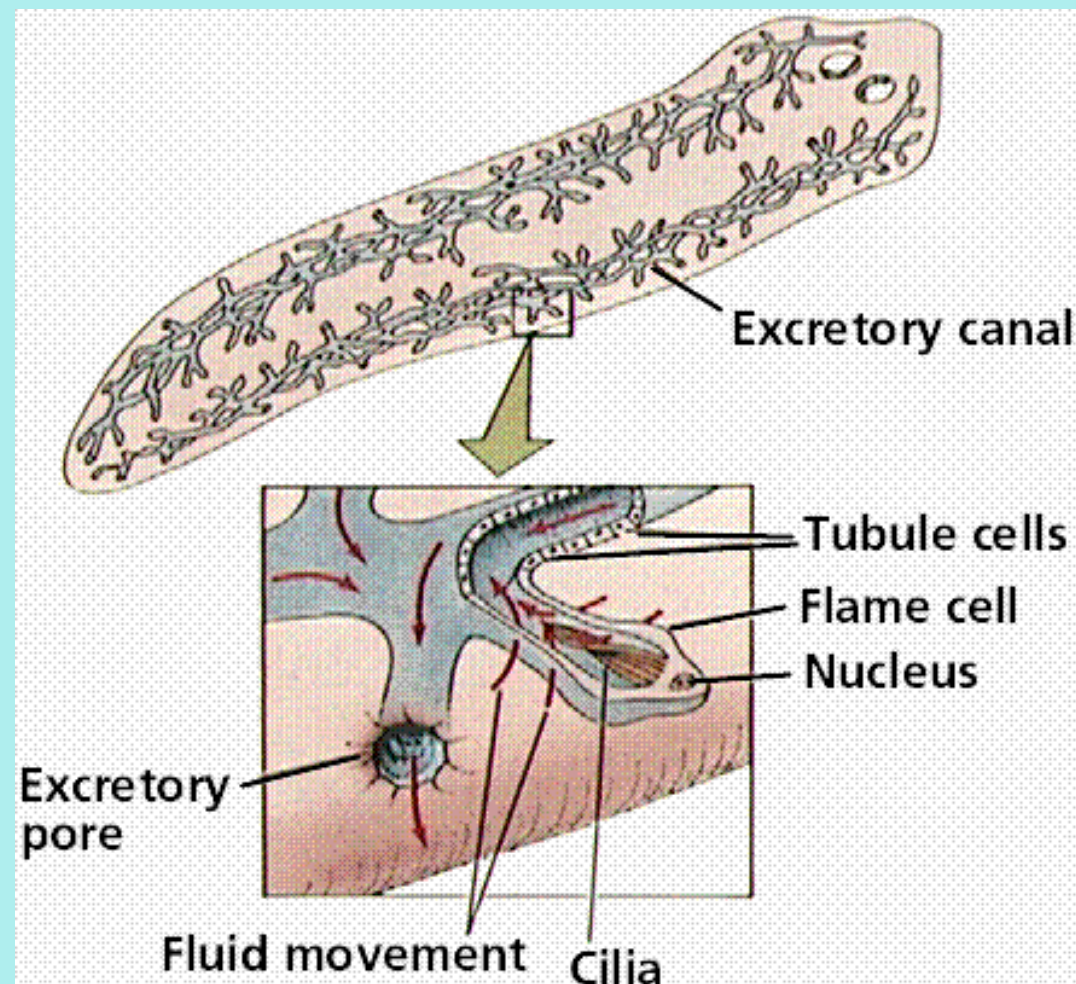




<http://www.youtube.com/watch?v=J9EuFuJF9N0&NR=1>

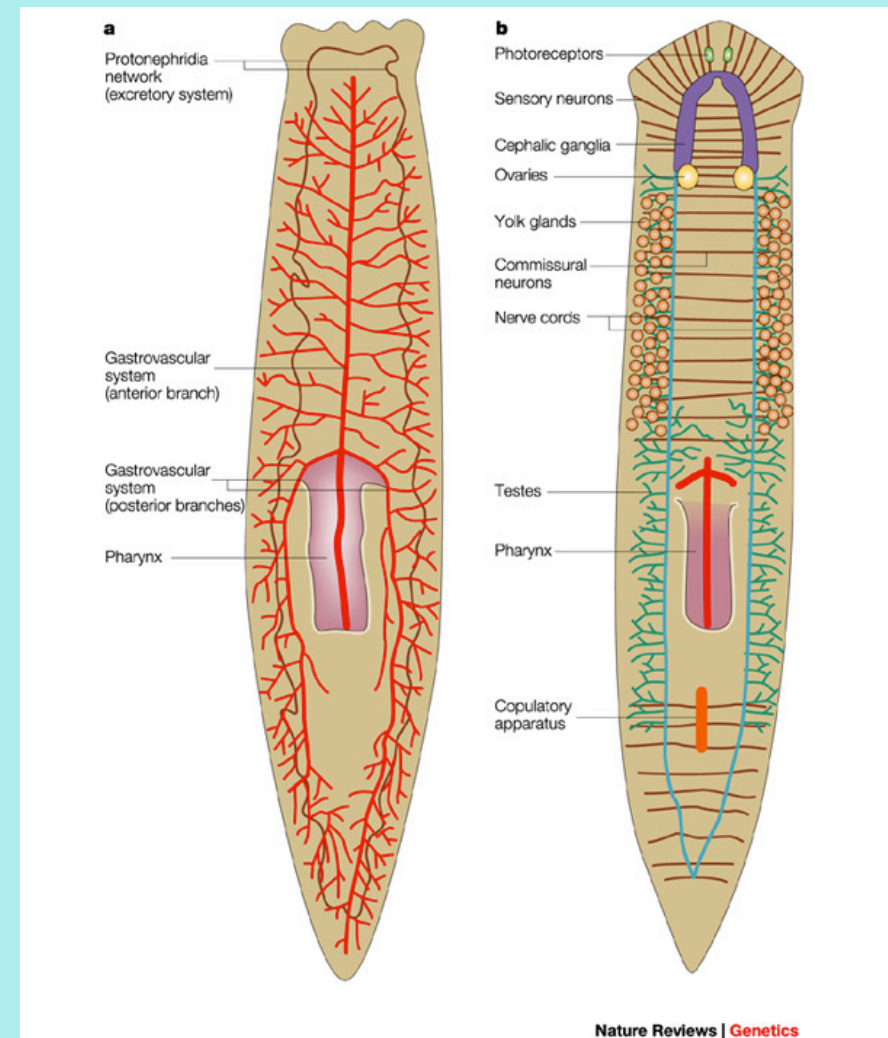
Respiration, Circulation & Excretion

- Most cells are in contact with external environment, so they rely on **diffusion**.
- No gills, heart, blood or blood vessels.
- Some have **flame cells**: specialized cells that remove excess water and wastes.



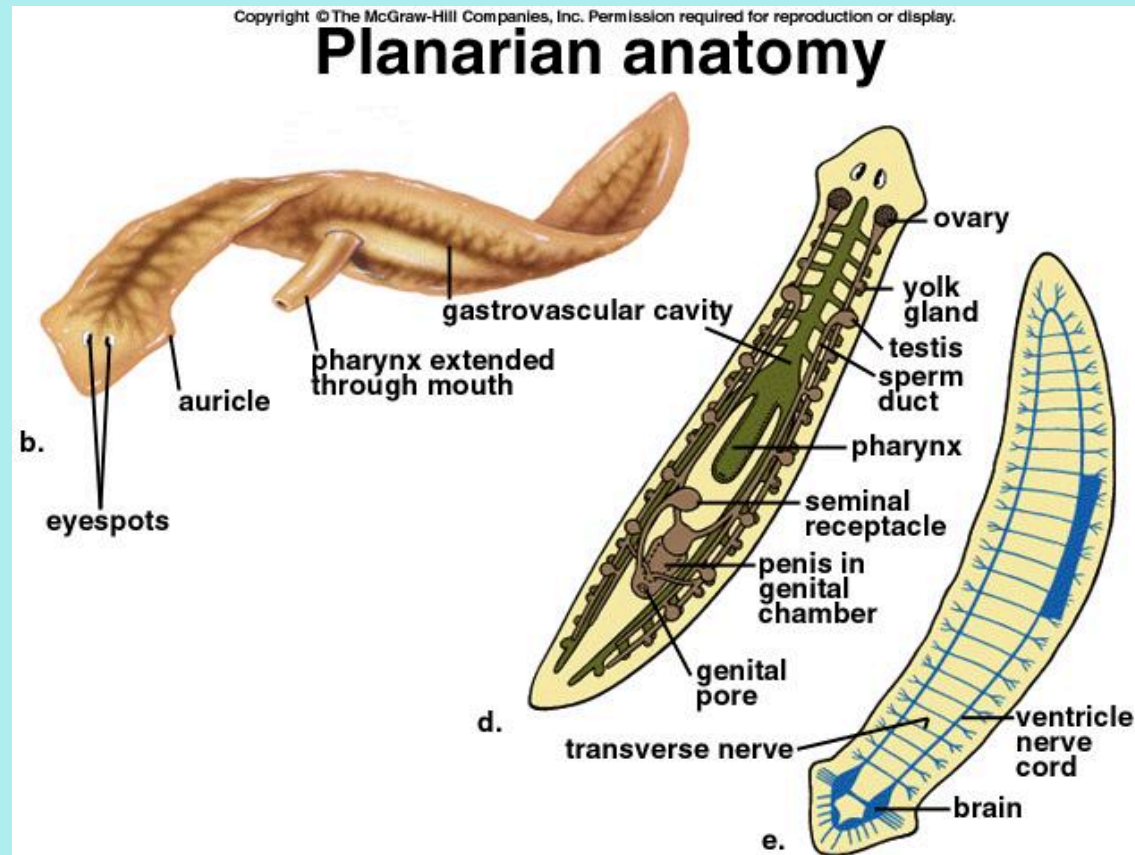
Response

- Head encloses several **ganglia**: groups of nerve cells
- Not complex enough to be called a brain
- Many have **eyespots**: groups of cells that can detect light.

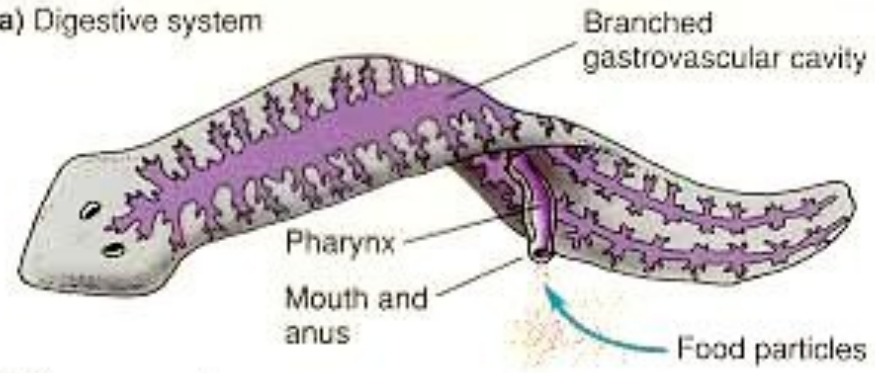


Reproduction

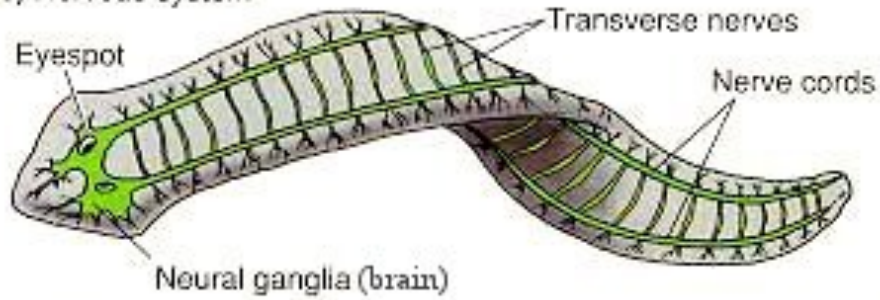
- Most are hermaphrodites: both male and female reproductive organs
- Sexual reproduction: two worms join and deliver sperm to each other; eggs are then laid in clusters
- Asexual reproduction: fission - organism splits in two and each half grows to form a complete organism



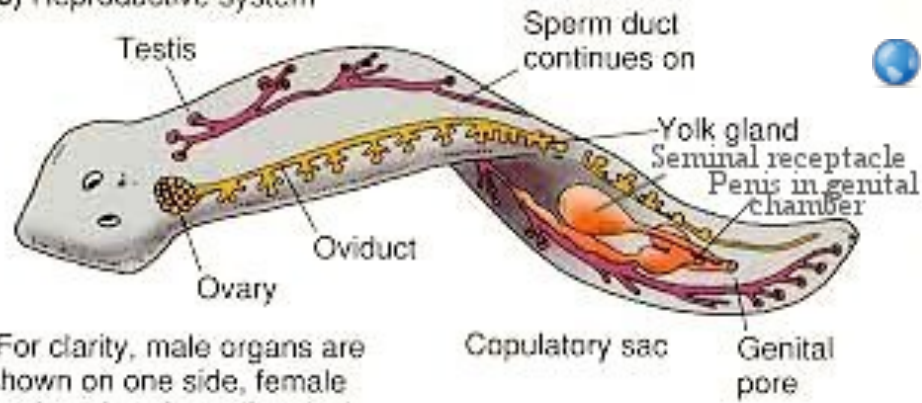
(a) Digestive system



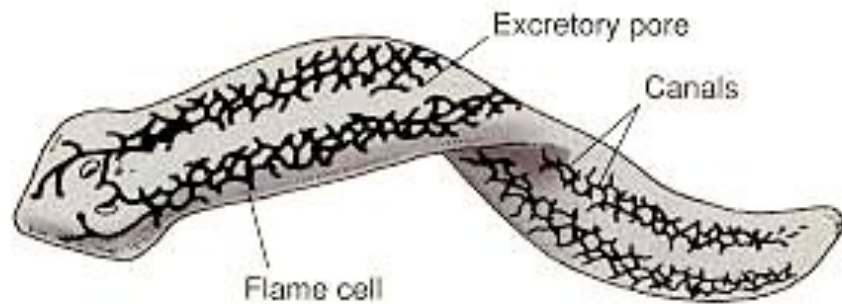
(b) Nervous system



(c) Reproductive system



(For clarity, male organs are shown on one side, female on the other. In reality, each is present on both sides.)



(d) Protonephridia
(flame cells, ducts, and pores.)

http://www.youtube.com/watch?v=Fq_aSR5FK0Y

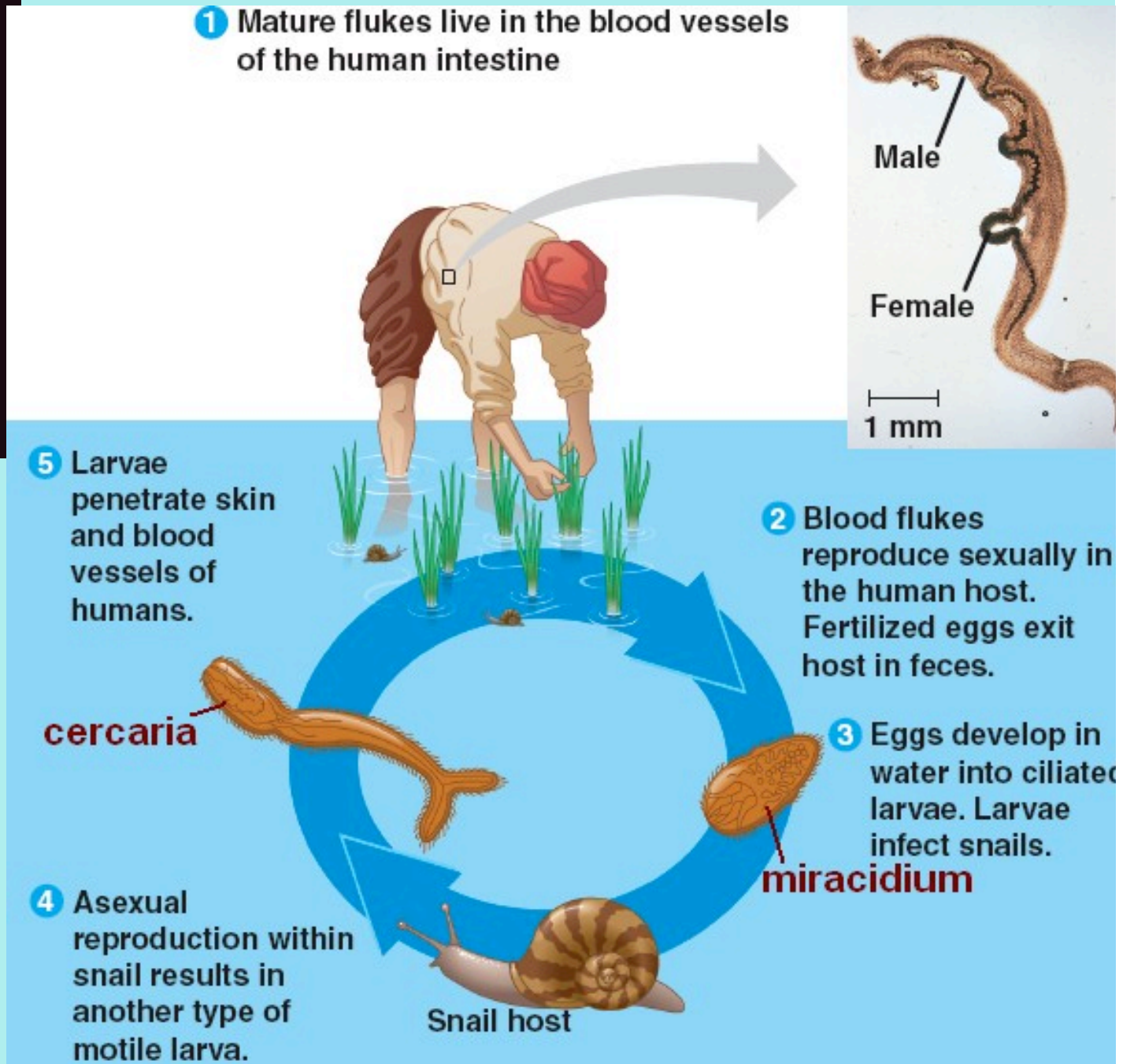
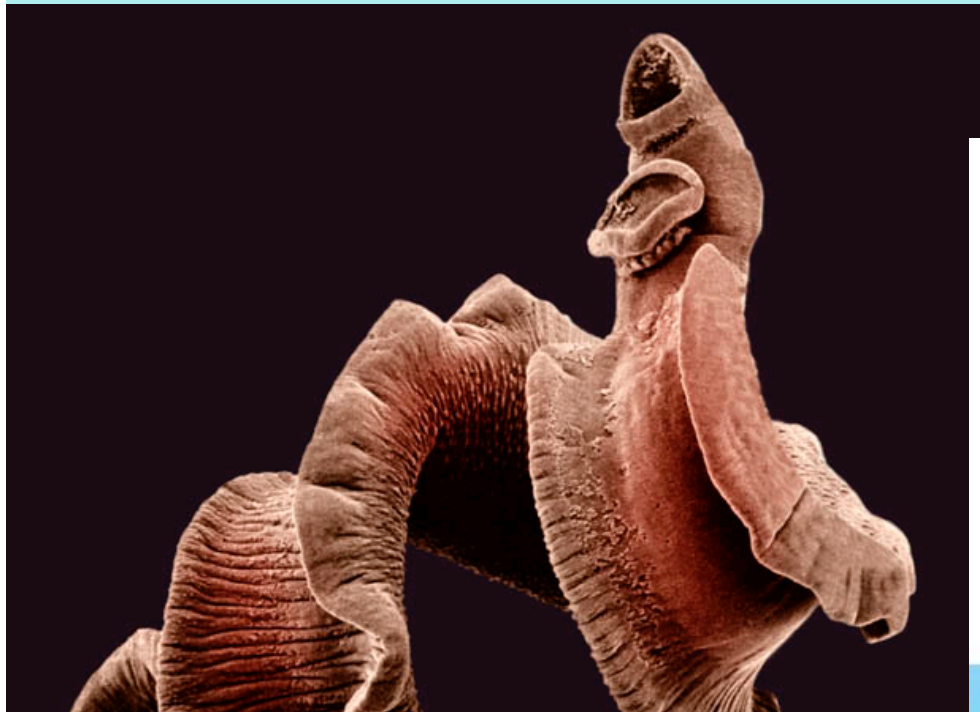
Tubellarians

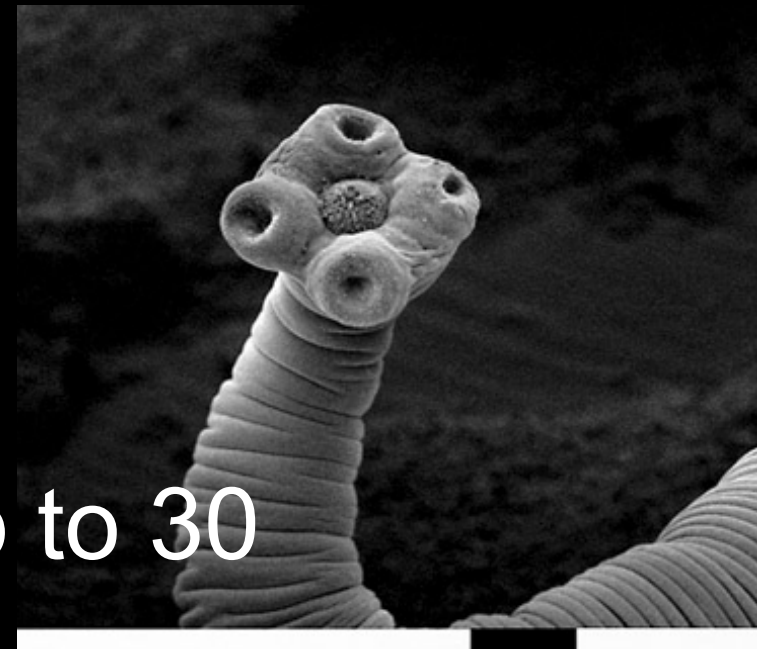
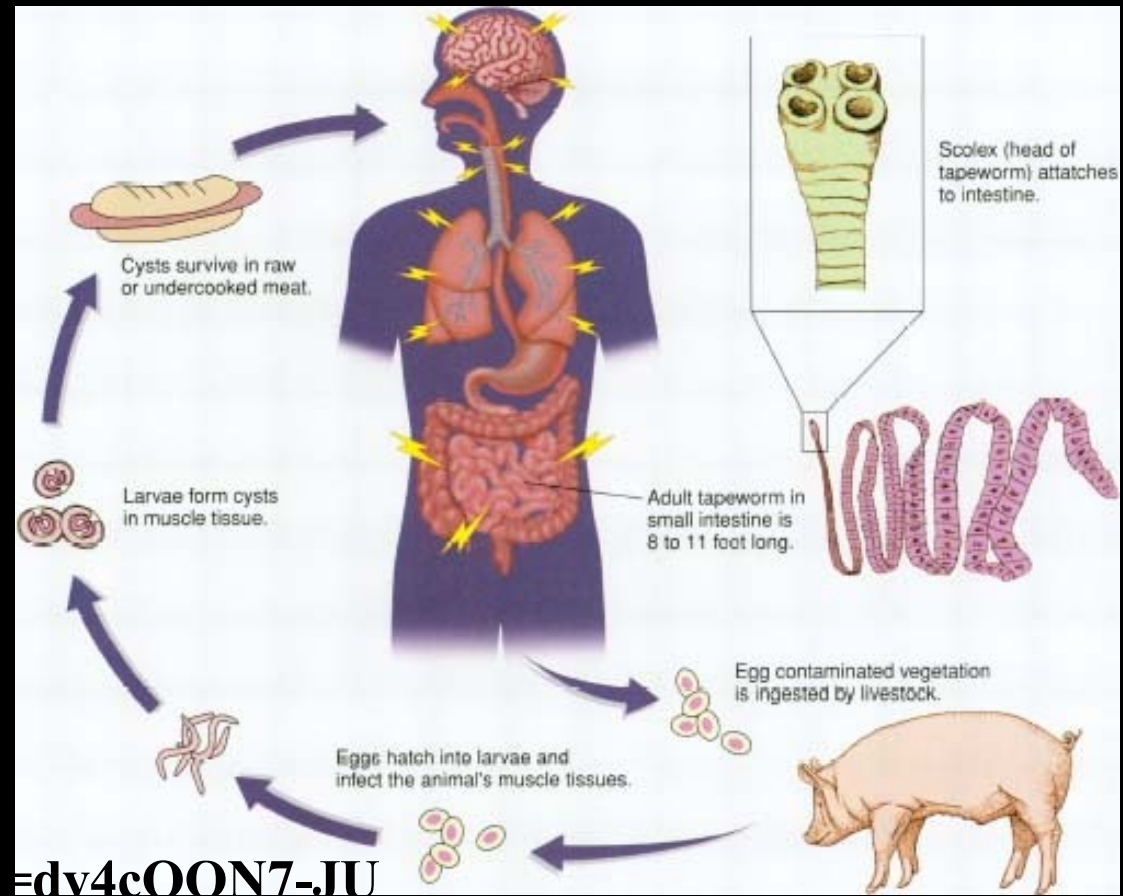


http://www.youtube.com/watch?v=zCH37KI_R_E



Blood Fluke





Some tapeworms can reach up to 30 meters long!!!

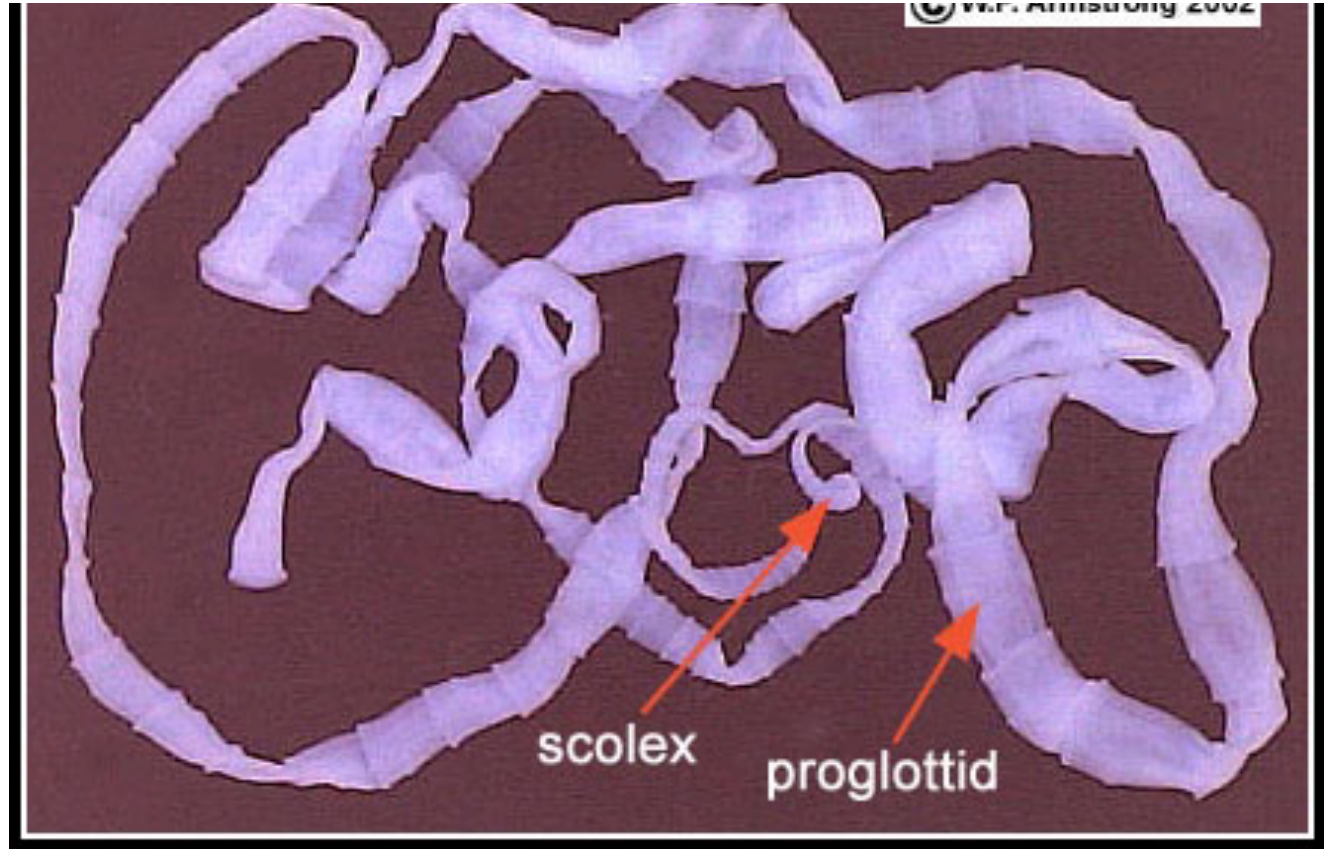
Complete the following:

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

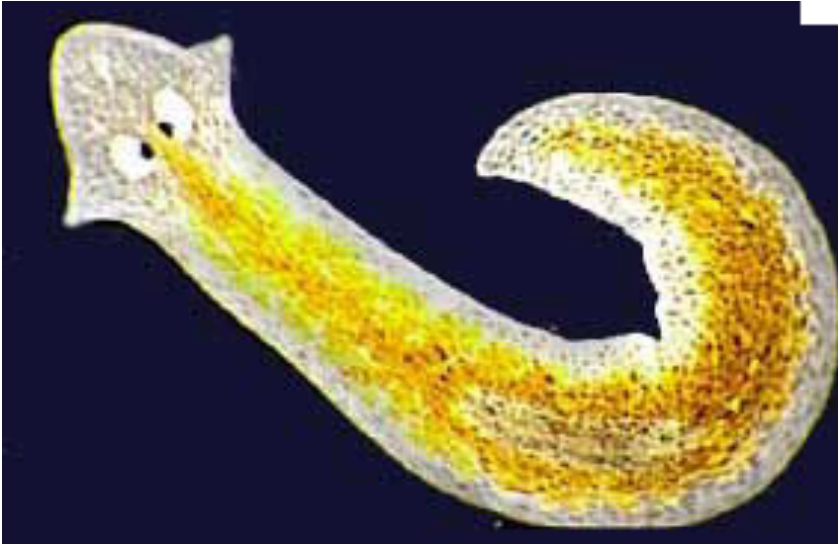
Read p.683-688

1-4

P.688



Planaria



http://www.hhmi.org/biointeractive/stemcells/planarian_regen.html

