

Zoology Unit 3 Study Guide: Worms

Name: KEY

	Platyhelminthes	Nematoda	Annelida
Common Name	Flatworms	Roundworms	Segmented worms
Segmented or Unsegmented body	Unsegmented	Unsegmented	Segmented
Type of Body symmetry	Bilateral	Bilateral	Bilateral
Body form: Acoelomate, pseudocoelom or coelom	Acoelomate	Pseudocoelom	Coelom
Classes of worms in that phylum	Turbellaria Trematoda Cestoda	n/a	Oligochaeta Polychaeta Hirudinea

Platyhelminthes

- Name the three types of organisms classified in the Phylum *Platyhelminthes*.
Flatworms / planaria, tapeworms, marine flatworms
- Flatworms do not have a fluid filled body cavity, which means they are Acoelomate.
- Which type of cell aids in helping flatworms remove excess water? Flame cells
- Explain how free-living worms eat.
The pharynx extends out of the mouth, the pharynx pumps food into the cavity; food is digested by cells in the gut
- Explain how parasitic worms get nutrients.
They obtain nutrients from foods that already have been digested. They feed on blood, tissues or pieces of cells w/in the host

6. What is a primary host? What is an intermediate host? → where it develops into larvae

↓
Where the parasite reproduces

7. Explain why you should never eat undercooked meat (related to flatworms)

Parasitic worms may be living in the meat.

	Turbellaria	Trematoda	Cestoda
Types of worms in this class or examples	Flatworms Planaria	Flukes	Tapeworms
Characteristics of these worms	Non-parasitic mostly free living found on rocks or leaf litter	1 or 2 suckers to attach to host can infect humans	Long, flat parasitic worm

Define the following terms:

Cephalization	Concentration of sense organs and nerve cells at the front of the animal	Ganglia	Groups of nerve cells that control the nervous system
Eyespot	detects changes in the amount of light	Flame cell	specialized cells that filter & remove excess water from the body
Regeneration	the process by which animals replace lost or damaged parts by growing new ones	Scolex	head of a tapeworm
Proglottid	Segments that make up most of a tapeworm's body		

Nematoda

1. How many openings are there in the digestive tract of nematodes? What are they?

2 - mouth + anus

2. Describe the life cycle of *Trichinosis*.

They form cysts in the animal → are consumed (undercooked), the worms grow in the intestines of new host

3. What insect transmits *filarial* worms? What does *filarial* worms cause in a person?

MOSQUITOES elephantiasis

4. Where do *ascaris* worms live in their primary host?

intestines

5. How could a person contract hookworms? What is the purpose of the hooks?

Stepping barefoot in soil ↪ latch on to host

6. Which organism was the first to have their DNA completely sequenced?

C. elegans

Annelida

1. What characteristic do Annelida have that round and flat worms don't?

A segmented body

2. What type of circulatory system is found in an earthworm?

closed

3. Explain what setae and Parapodium are and what they help the worm do.

Setae - hair like structures
Parapodium - muscular bristle bearing appendages

4. What are the two type of muscles and how do they change the size of the worm when they contract?

Circular - stretches worm

~~Longitudinal~~

Longitudinal - shortens/fattens worm

Movement

5. Define nephridium.

A tubule open to the exterior that acts as an organ of excretion

6. Do worms have gills or lungs? How do they get oxygen?

NO

diffusion

7. Do worms have red hemoglobin their blood? Yes

8. What is the function of the clitellum?

Stores eggs + produces a "slime band" to protect eggs

9. What class are earthworms in?

Oligochaeta

10. What class are bristleworms, tube worms and feather duster worms in?

Polychaeta

11. What class are leeches in? Hirudinea

12. Label the parts of this earthworm. State the function of each part.

