

Flatworms (p. 629 – 632)

I. Flatworms

1. Flatworms make up the phylum Platyhelminthes.

2. What type of worms are flatworms?

Circle One : Acoelomates Coelomates Pseudocoelomates

3. Flatworms have tissues organized into organs.

Circle One : True False (Unlike sponges + cnidarians)

4. Describe a flatworm's body structure.

- Bilaterally symmetrical + flat

5. Since flatworms are very thin, what cellular process occurs to perform essential functions?

Diffusion

6. Circle the letter of each system that is present in flatworms.

- a. Digestive System - gastrovascular cavity
- b. Respiratory System
- c. Circulatory System
- d. Reproductive System - main part of tapeworms

7. What is the size range of flatworms?

- Free-living (1mm) to Tapeworms (18 meters)

II. Planarian (Up Close Section p. 630)

p. 630

1. Match the planarian anatomical terms with the correct definitions.

- | | |
|------------------------------------|--|
| 1. <u>D.</u> Ganglia | A. Ladder-like structure; connects muscles to brain. |
| 2. <u>G.</u> Eyespot | B. Muscular tube near the mouth. |
| 3. <u>A.</u> Nerve Cords | C. Digestive tract with an attached mouth. |
| 4. <u>B.</u> Pharynx | D. Group of nerve cells known as a brain. |
| 5. <u>C.</u> Gastrovascular Cavity | E. Cells that remove excess water and wastes. |
| 6. <u>E.</u> Flame Cells | G. Group of cells sensitive to light. |

2. Planaria are capable of asexual reproduction only. (Regeneration → Very successful!)

Circle One : True False Sexually → hermaphrodites

3. What type of digestion do planaria exhibit? (Not in the book.)

Circle One : One-Way Two-Way

III. Turbellaria

1. What types of flatworms are assigned to the Class Turbellaria?

- Free-living, marine bottom dwellers
↳ mainly

p. 629

2. Circle the letter of each sentence that is true about turbellarians.

- a. Most live in marine or fresh water.
- b. Most are the same color, form, and size.
- c. Most are bottom dwellers.
- d. The most studied are the planarians.

IV. Cestoda

p. 631

1. What types of flatworms are assigned to the Class Cestoda?

- Long, flat, parasitic worms that live in host's intestines.

2. What are members of the Class Cestoda commonly called?

Tape worms

3. How does a tapeworm parasitize a host?

- Attach head to intestinal wall and absorb food through skin

4. Define the term proglottids.

Proglottids - string of rectangular reproductive body sections (make up most of the body)

5. How long can tapeworms grow in size? Up to 18 meters

6. How can you avoid getting beef tapeworm (*Taenia saginata*)?

- Heat food to level that will kill infected beef's larvae

Scolex
- head of tapeworm with sucker + hooks

V. Trematoda

p. 632

1. What types of flatworms are assigned to the Class Trematoda?

- Parasitic flatworms that infect host's internal organs or outside parts

2. Define the term flukes and tegument.

Flukes - parasites that live inside their hosts

Tegument - thick protective covering of cells (prevents them from being digested)

3. How does a fluke parasitize a host?

- Suckers attach to host + they suck in host's body fluids

4. How does the blood fluke, *Schistosoma mansoni*, infect humans?

① - People wade in water with contaminated larvae ② Larvae penetrate skin ③ Make their way into blood vessels ④ Block blood vessels and damage liver (Schistosomes) → some countries

Intermediate Host
- Snails