

LIFE SCIENCES 11

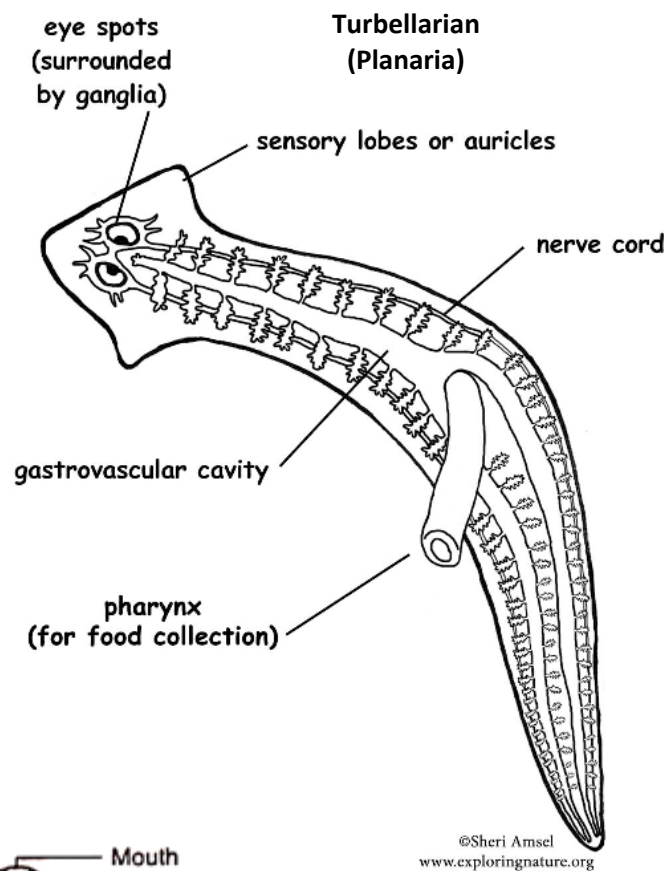
FLATWORMS

Phylum	Platyhelminthes
Level of Organization	Organ
Digestive System	Sac or None
Symmetry	Bilateral
Coelom	Acoelomate
Segmentation	None

Platyhelminthes

- have thin, flat ribbon-like bodies with a distinct head region
- 3 classes
 1. Turbellarians
 - free-living → use cilia to glide around
 - eye spots to detect light
 - feed on dead or slow moving organisms
 - extend the pharynx out of the mouth and secrete digestive enzymes on food, then suck up the food particles
 - sac digestive system → waste materials excreted from the mouth
 - auricles → chemoreceptors capable of sensing stimuli from food
 2. Trematodes
 - parasitic flukes
 - have a 2 host life cycle
 3. Cestodes
 - parasitic tapeworms
 - lack a digestive system
 - scolex (head) attaches to host's intestinal wall
 - nutrients are absorbed through the skin
 - proglottids contain eggs for fertilization
 - tail end proglottids break off releasing embryos that can infect blood and muscle of second host
- have simple organ systems
 - excretory system (flame cells) that removes excess water and waste products through pores on side of body
 - simple nervous system with a group of ganglia sends signals to the body
- reproduction
 - sexual
 - hermaphrodites
 - eggs are fertilized internally
 - cocooned zygote released into water to hatch

- asexual
 - regeneration – can be cut in half and each part grows into a new organisms



Liver Fluke

