

## Notes - Themes of Zoology

Animals are multicelled heterotrophic eukaryotes with no cell wall

- Reproduce sexually with sperm and egg (some can reproduce asexually)

Development - from fertilized zygote to adult, what stages does the organism go through? What type of larva does it have?

Tissue layers - are its cells organized into layers? Are there two or three? What organs develop from each layer (Endo/meso/ectoderm)?

Body Cavities - Does it have an isolated internal space that allows for specialized organ development? (Acoelom/Pseudocoelom/Eucoelom)

Symmetry - Does it have an organized structure? Is it radial, bilateral or biradial?

Other body structures?

- digestive system - Is it a dead end or is it one-way system? Which end forms first?
- cephalization (head)
- segmentation (repeated body structures)
- skeleton (endoskeleton/exoskeleton)