

KINGDOM ANIMALIA: The First 5 Phyla - NOTES

CHARACTERISTICS:

- Eukaryotes
- All multicellular
- All heterotrophic
- Most reproduce sexually, some asexually

Refer to the ***Phylum Summary Table*** for characteristics of the 5 phyla: *Porifera, Cnidaria, Platyhelminthes, Nematoda & Annelida*.

Phylum Porifera

Ex) Sponges = “Pore Bearers”

Additional Characteristics:

- Sessile – cannot move
- Able to regenerate = can regrow missing or damaged body parts.
- Simplest and most primitive animals.
- Has spicules – glass-like structures that give support and structure (skeletal)

Phylum Cnidaria

Ex) Sea jellies, Hydra, Coral colonies, Sea anemones

Additional Information:

- Have nematocysts for feeding and defense

Alternation of generations in cnidarians: 2 body plans polyp & medusa

Phylum Platyhelminthes

Ex) Planaria, flukes and tapeworms

Additional Information:

Free living

Ex) **Planaria** – freshwater

- Stores food as fat
- Brain coordinates movement & capable of learning its way through a maze.
- Able to respond to light and chemicals

Parasitic

Ex) **flukes and tapeworms**

- Lives in the digestive tract & absorbs digested food from host so **NO digestive tract!**
- This leaves more room for reproduction – capable of producing 1,000s of eggs.

Phylum Nematoda

Ex) *Trichinella*, hookworm, nematode

- Most are free living and harmless
- Some parasitic

Ex) *Trichinella* – from undercooked pork. Causes the disease Trichinosis.

- Hookworms have hooks and sharp teeth to burrow into a host.

Evolution of Parasitic Worms

- Parasitic worms couldn't compete with other worms so they went where there is less competition
 - The digestive tract & circulatory system of animals.

Phylum Annelida

Ex) Earthworms, polychaete (marine) worms, leeches

3 classes:

- Oligochaeta – earthworm
- Polychaeta – marine worm
- Hirudinea – leech

- Free living = earthworm & marine worm
- Parasitic = leech