



Kingdom Animalia

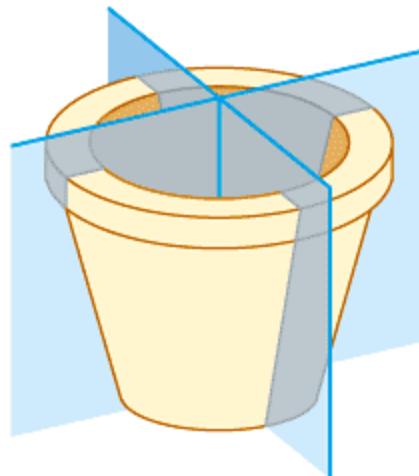
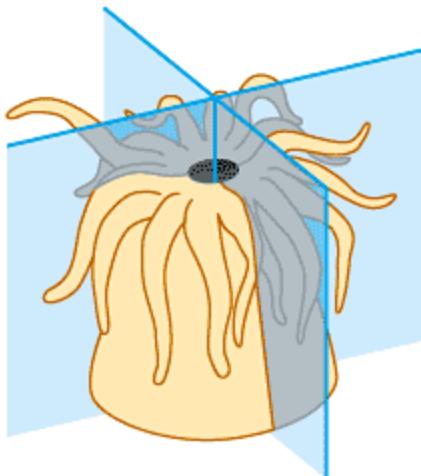


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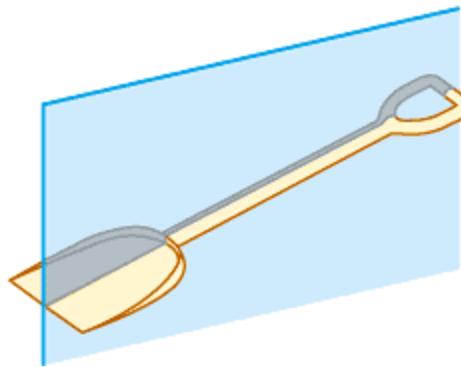
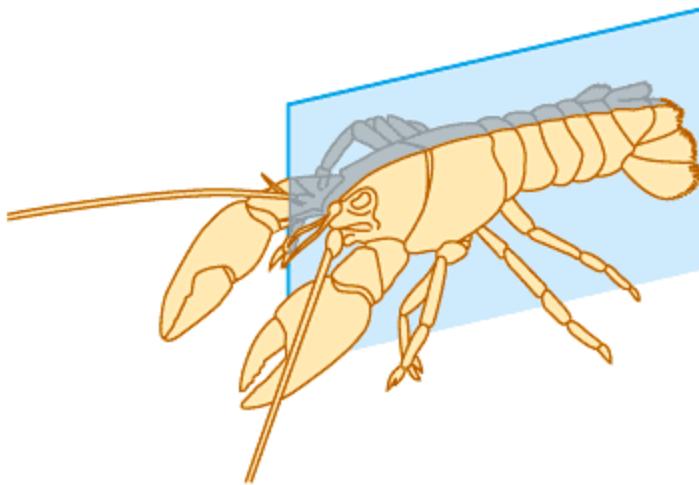
- Characteristics:
 - Eukaryotics
 - All multicellular
 - All heterotrophic
 - Most reproduce sexually, some asexually



Symmetry

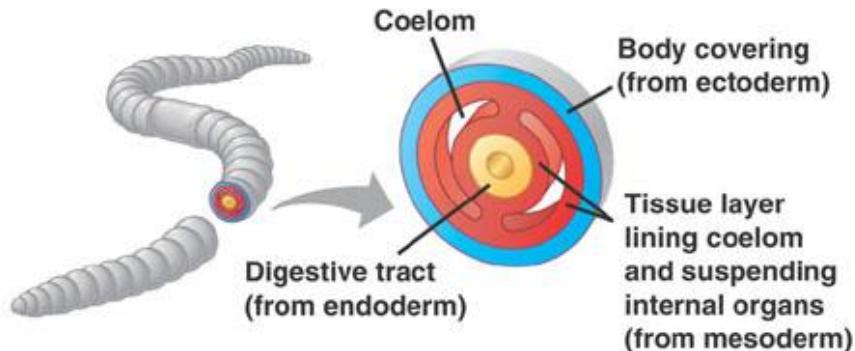


(a) Radial symmetry

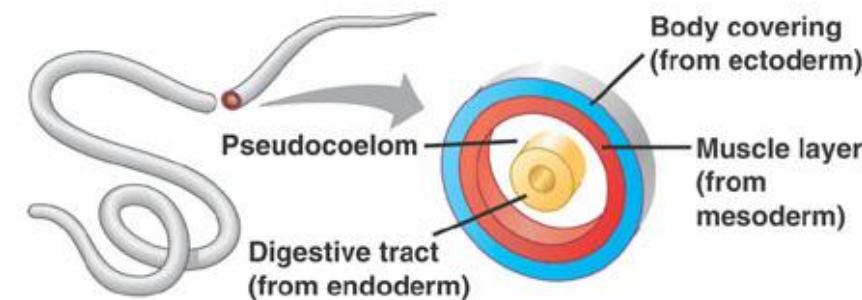


(b) Bilateral symmetry

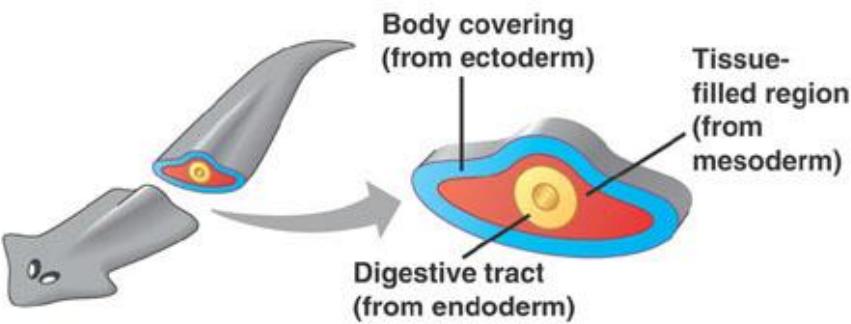
Body Cavities



(a) Coelomate



(b) Pseudocoelomate



(c) Acoelomate

Phyla we will study

- Phylum Porifera



- Phylum Cnidaria



- Phylum Platyhelminthes



- Phylum Nematoda



- Phylum Annelida



- Phylum Mollusca



- Phylum Echinodermata



- Phylum Arthropoda



- Phylum Chordata





Phylum Porifera

“pore bearers”

SPONGES



Brain Sponge



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Cloud Sponge



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<http://dive.bc.ca>

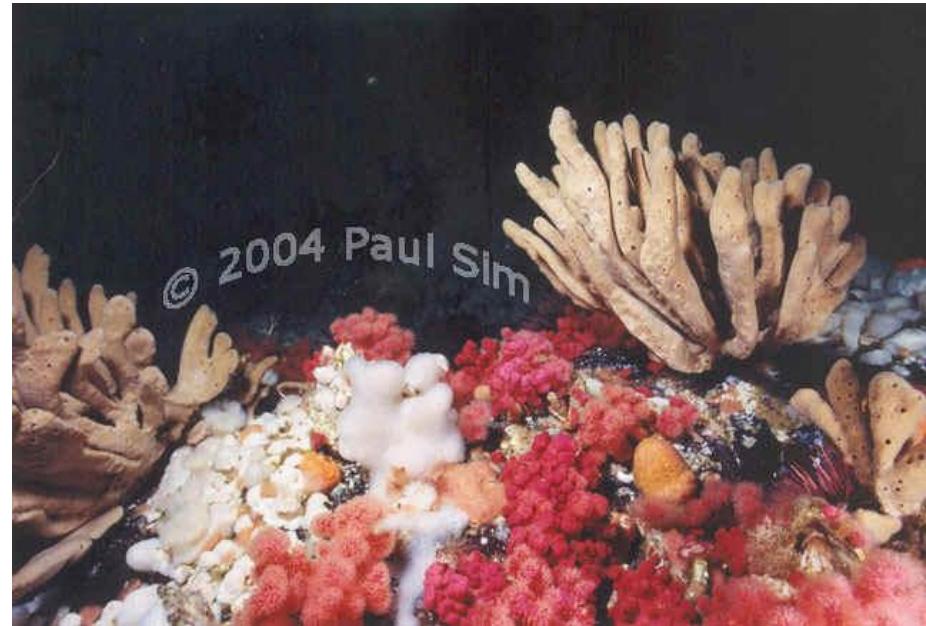
Characteristics:

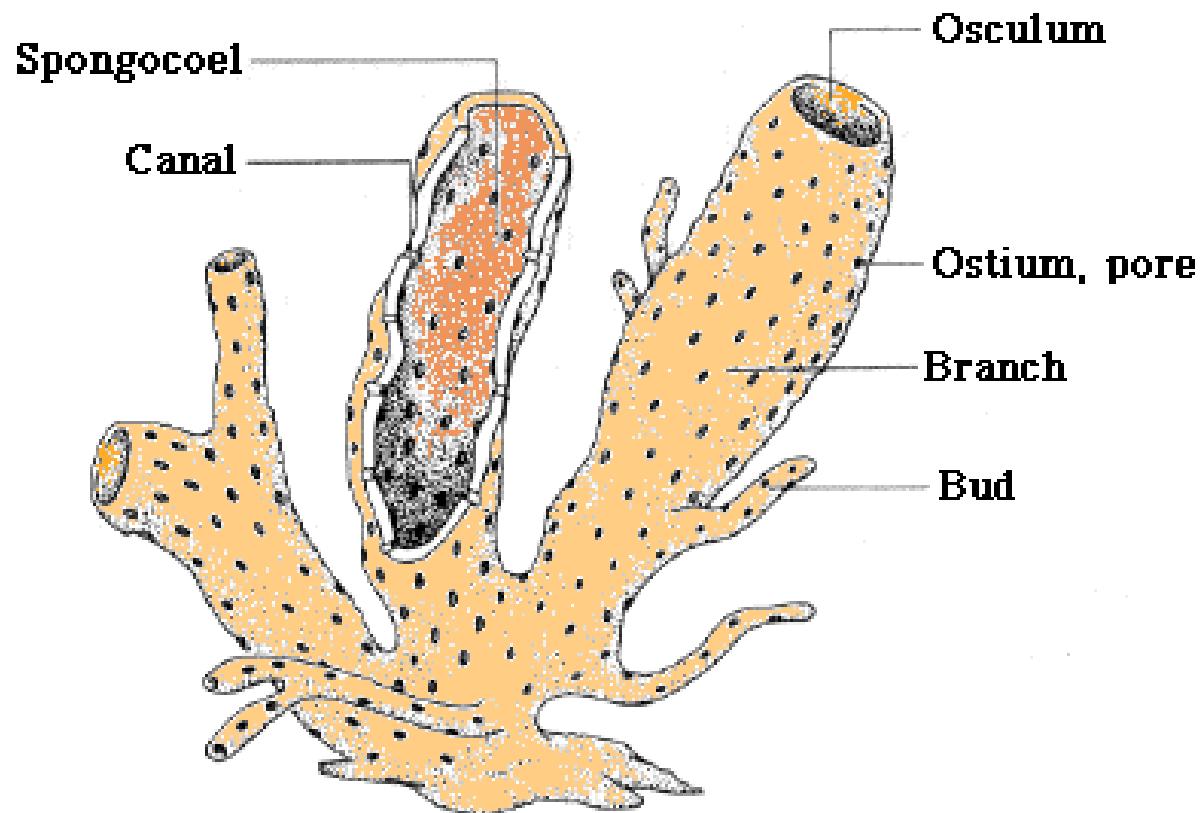
- Body type: asymmetry
- Ecological roles:
 - food source
 - homes/shelter
 - symbiotic with bacteria
- Body organization – 2 germ layers: endoderm and ectoderm.
- Body cavity: acoelom

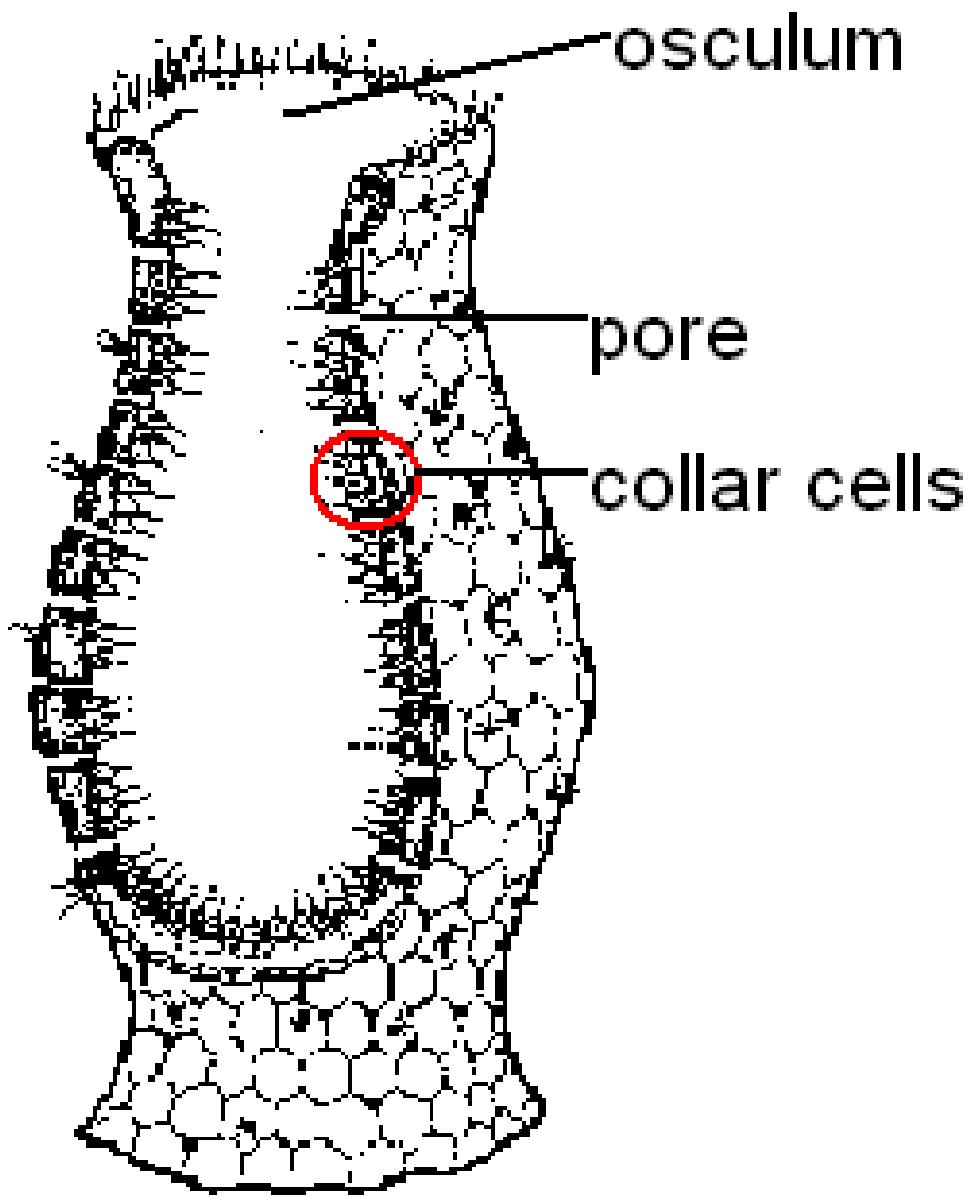
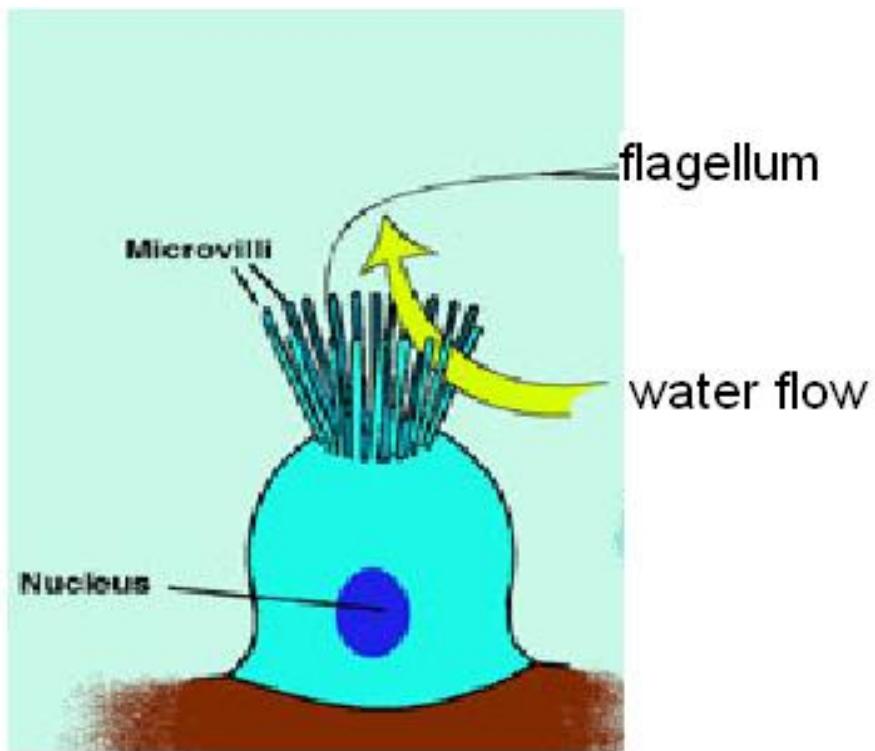


Characteristics continued:

- Digestive system:
 - Filter feeders - using collar cells, food vacuoles & osculum
- Reproduction:
 - Sexual: hermaphroditic
 - Sponges undergo metamorphosis
 - Asexual: budding, branching, & fragmentation







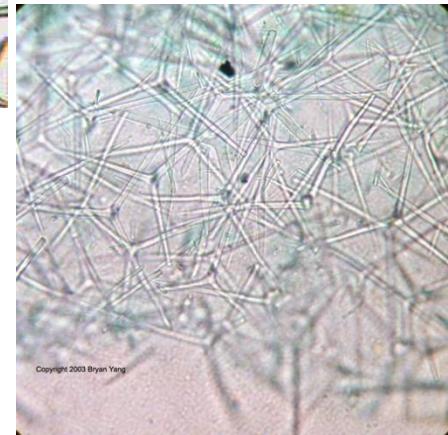
Characteristics continued:

- Circulation: diffusion
- Nervous system: none
- Respiration & excretion: diffusion
- Habitat: aquatic – oceans and lakes



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



The Wonderful World of Sponges (start at 1 minute):

<http://www.youtube.com/watch?v=BW05vMziy2o&NR=1&feature=fvwp>

You tube sponge reproduction:

<http://www.youtube.com/watch?v=KOFFzXNYJG0>

