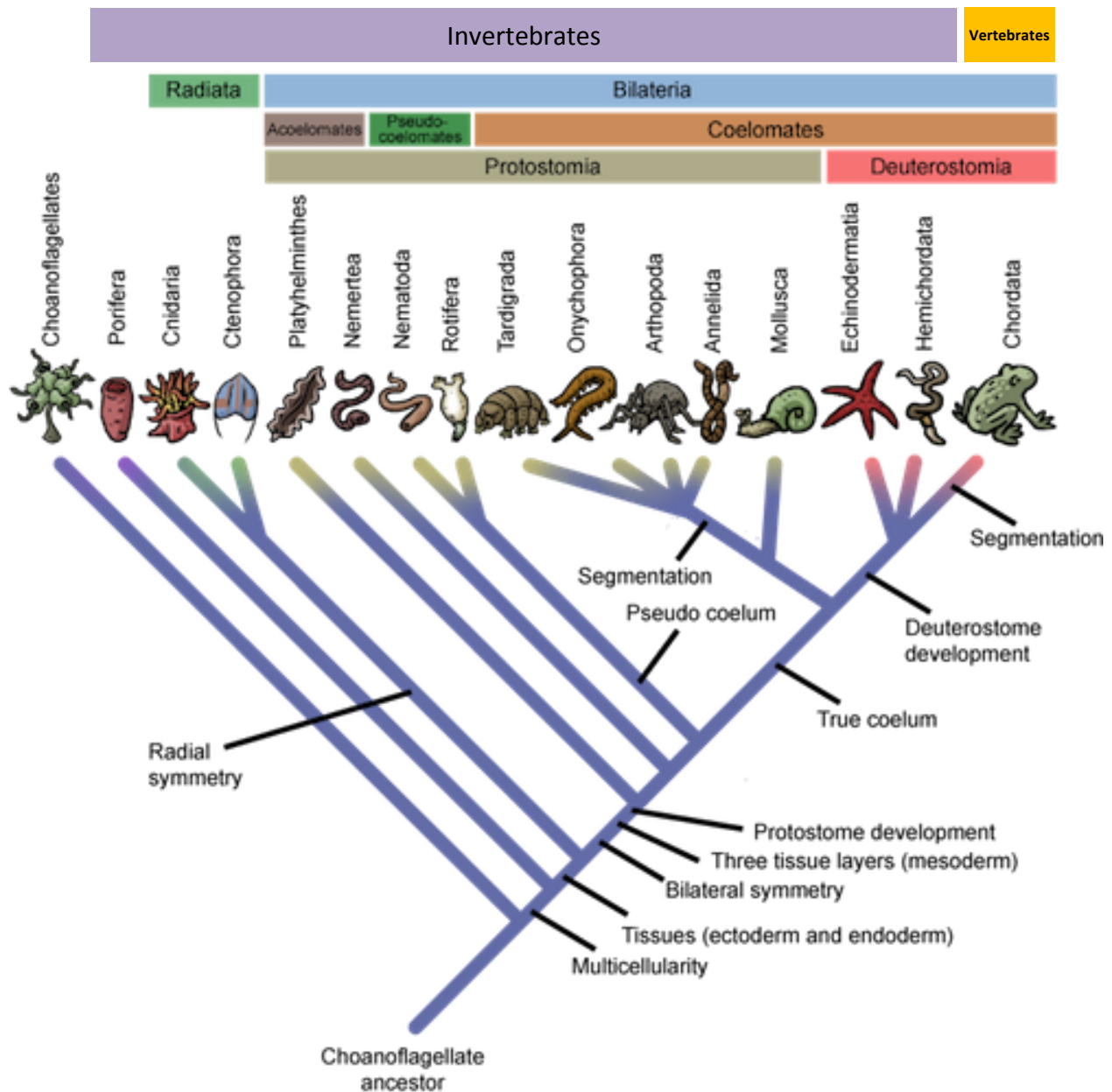


# Kingdom Animalia

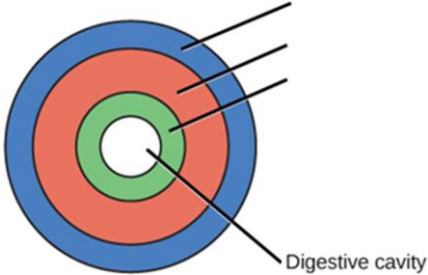
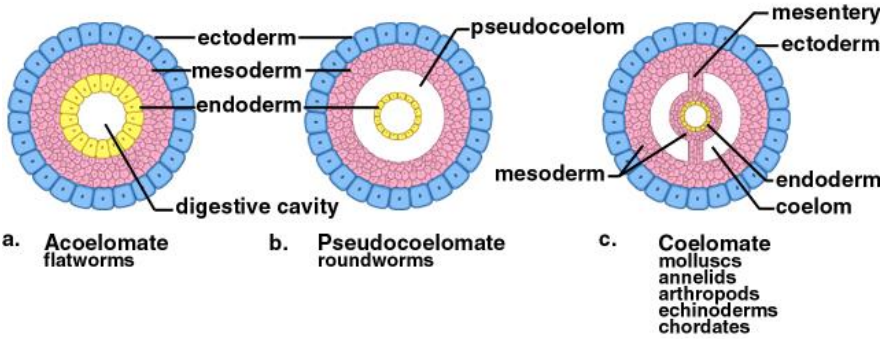
It is believed that the ancestor of all animals was a multicellular species of protist (similar to choanoflagellates).

What key characteristic did these multicellular protists develop in their body plan?

## Phylogenetic Tree of the Kingdom Animalia



# Key Characteristics Used to Distinguish Animal Phyla

	<i>First Phylum to Show this key Characteristic</i>
<p><b>1) Symmetry</b></p> <p>Radial symmetry: _____            _____</p> <p>Bilateral symmetry: _____            _____</p>	<p>_____</p> <p>_____</p>
<p><b>2) Germ Layers (Tissues)</b></p> 	<p><i>First to have ectoderm and endoderm</i></p> <p>_____</p> <p><i>First to have all three germ layers including mesoderm</i></p> <p>_____</p>
<p><b>3) Coelom</b></p> <p><i>What is a true coelom?</i></p> <p>_____</p> <p>_____</p>  <p>a. Acoelomate flatworms      b. Pseudocoelomate roundworms      c. Coelomate molluscs, annelids, arthropods, echinoderms, chordates</p>	<p><i>First Acoelomates</i></p> <p>_____</p> <p><i>First Pseudocoelomates</i></p> <p>_____</p> <p><i>First Coelomates</i></p> <p>_____</p>
<p><b>4) Embryonic Development</b></p> <p>Protostome = anus develops first</p> <p>Deuterostome = mouth develops first</p>	<p><i>First Protostome</i></p> <p>_____</p> <p><i>First Deuterostome</i></p> <p>_____</p>

# The Chordates

What is a notochord?

