

Phyla in the animal Kingdom	Representative animals Common Name	Body symmetry: ❖ Bilateral ❖ Radial	Body Plan (coelom) ❖ 2 tissue layers ❖ acoelomate ❖ pseudocoelomate	Embronic development ❖ deuterostome ❖ protostome	# germ layers 2/3
<i>Porifera</i>					
<i>Coelenterates (Cnidaria)</i>					
<i>Platyhelmenthes</i>					
<i>Nematoda</i>					
<i>Mollusca</i>					
<i>Annelida</i>					
<i>Arthropoda</i>					
<i>Echinodermata</i>					
<i>Chordata</i>					

	Digestive system ❖ Branched digestive cavity with 2 openings ❖ Complete digestive tract-tube within a tube ❖ Gastrovascular cavity ❖ Individual cells	Circulation ❖ Closed ❖ Open ❖ Gastrovascular cavity ❖ No circulatory system	Gas exchange ❖ Gastrovascular cavity ❖ Gills ❖ Lungs or gills ❖ Simple diffusion (no system) ❖ Skin ❖ Trachea/book lungs /book gills ❖ Tube feet	Waste disposal ❖ Simple diffusion ❖ flame cells ❖ gastrovascular cavity ❖ kidneys ❖ malpighian tubules ❖ nephridia	Nervous system: (choose one from each category) ❖ Cephalized ❖ not cephalized <hr/> ❖ nerve net ❖ 3 pairs of ganglia ❖ dorsal nerve cord ❖ ventral nerve cord ❖ 2 ventral nerve cords	
<i>Porifera</i>						
<i>Coelenterates (Cnidaria)</i>						
<i>Platyhelmenthes</i>						
<i>Nematoda</i>						
<i>Mollusca</i>						
<i>Annelida</i>						
<i>Arthropoda</i>						
<i>Echinodermata</i>						
<i>Chordata</i>						

	Reproduction ❖ separate sexes ❖ hermaphrodites ❖ asexual ❖ sexual & asexual	Major evolutionary advances
<i>Porifera</i>		
<i>Coelenterates (Cnidaria)</i>		
<i>Platyhelmenthes</i>		
<i>Nematoda</i>		
<i>Mollusca</i>		
<i>Annelida</i>		
<i>Arthropoda</i>		
<i>Echinodermata</i>		
<i>Chordata</i>		