	Key invertebrate phyla							
Characteristics		Cnidaria	Platyhelminthes	Nematoda	Annelida	Molllusca	Arthropoda	Echinodermata
Examples of Organisms	*Sponges*	Sea Jellies	Marine flatworms	Round worms	Earthworms; leeches	Mussel	Insects, crustaceans, arachnids	Sea stars, brittle stars, sea urchins deuterstomes
Number of Tissue layers in Embryo	*Doesn't Apply*	*2; ectoderm and endoderm*	3	3	3	3	3	3
Tissue versus organ level development	*Quasi tissue level*	*Tissue level*	Tissue level	Organ level	Organ level	organ	Well-developed sensory organs	Organ level
True muscle cells?	*No*	*No; have epithelio-muscular cells*	yes	yes	Yes	yes	Yes, attached to exoskeleton	Yes, have hollow muscular tubes
Symmetry? Cephalization?	Asymetric, no	Radial	Bilateral; yes	Bilateral;	Bilateral;	Yes Bilateral	Bilateral symmetry, yes	Pentaradial symmetry, no cephalization
Coelom? Type?	No	No	No	Yes; psuedocoelom	schizocoelom	Yes coelomate	Yes Becomes more reduced with development	enterocoelom from the archenteron
Digestive tract? Type?	No, intracellular digestion	Gastrovascular Cavity	Gastrovascular Cavity more highly branched	One way digestive tract from mouth to anus	Yes	Yes	Yes	Yes
Circulatory system? Type?	No, only diffusion	No, diffusion and some facilitated circulation	No, diffusion and some facilitated circulation	No, diffusion and some facilitated circulation	Yes, Closed	Yes, some open and some closed	Yes, open circulatory system	Yes, closed circulatory system
Nervous System? Type?	No	Nerve net	Yes, ladder-like nervous system with ganglion in the head end	Yes, lateral nerve cords	Yes, with brain and ganglia	Yes nerve endings around their esophagus	Yes, well-developed sensory organs	Yes, contain branching radial nerves
Other	Lack true tissues	Stinging structures	eyespots	Tough cuticle	Segmented worms. Segments known as setae	Hard shell calcium carbonate	Exoskeletons, molting, segmentation, joined appendages, internal systems for gas exchange	Have a unique water vascular system, a network of hydraulic canals that function in locomotion