

	Phylum Nematoda	Phylum Mollusca	Phylum Annelida
Defining Traits	-roundworms -complete digestive system	-true coelom -soft bodies -one or more shells -3 parts: head, foot, visceral mass -mantle	-metamerism (segmented) -setae -well-developed organ-systems
Symmetry	bilateral	bilateral	bilateral
Coelom	pseudocoelomate	coelomate	coelomate
Level of Organization	organ-system	organ-system	organ-system
Nervous	-ganglia -nerve cords -sense organs	-ganglia -nerve cord -sense organs	-ganglia -ventral nerve cord with segmental ganglia -sense organs
Skeletal	hydrostatic skeleton	-hydrostatic skeleton -shell	hydrostatic skeleton
Muscular	longitudinal layer of muscles	muscle contractions in foot	circular layer and longitudinal layer
Digestive	complete: mouth → intestine → anus	complete: mouth → esophagus → stomach → intestines → anus digestive gland	complete: mouth → pharynx → esophagus → crop → gizzard → intestines → anus
Respiratory	diffusion	gills or lungs	diffusion through cuticle

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Circulatory	distribution through coelomic fluid	open system with heart, blood vessels, and sinuses	closed system with 5 pairs of aortic arches
Excretory	excretory tubules and pores	nephridia or simple kidney	nephridia
Reproduction	-sexual reproduction -distinct sexes -external fertilization	-sexual reproduction -distinct sexes or hermaphrodites -external fertilization	-hermaphrodites -external fertilization
Classes		1.Polyplacophora-chitins 2.Gastropoda-snails, slugs, nudibranchs 3.Bivalvia-clams, oysters 4.Cephalopoda-octopus, squid, nautilus	1.Oligochaeta-earthworms 2.Polychaeta-tube worms 3.Hirudinea-leeches
Miscellaneous	-non-living cuticle for outer covering -most are free-living, some are parasites -important decomposers	-siphons: <u>in</u> current and <u>ex</u> current -radula-rasping tongue	-burrowing releases important nutrients (carbon dioxide, potassium, nitrogen, etc.) and allows for aeration of plant roots