

## Greek & Latin Root Meanings for Taxonomic Classifications

(Produced by Kristine Cummins, Fall 2014)

Classification	Greek or Latin Meaning	About Animal
<b><u>Autotroph</u></b>	auto-: self, directed from within  -troph: combining form used in the formation of nouns with the general sense “nutrient matter” or “food level”	All organisms that produce their own food (makes it within itself through chemosynthesis or photosynthesis); nutrients absorbed from surroundings (soil or water).
<b><u>Heterotroph</u></b>	hetero-: different, other  -troph: see above	All organisms that must ingest other organisms for food and nutrients.
<b><u>Prokaryotes</u></b>	pro-: in front of, before	All single-celled living organisms without a nucleus and sexual reproduction. First to exist on planet Earth <i>before</i> any other life forms. Most simple.
<b><u>Bacteria</u></b>	bac-: rod-shaped	Type of prokaryote – often rod shaped!
<b><u>Archaea</u></b>	archae-: ancient	Type of prokaryote – earliest forms – often extremophiles and able to handle harsh environments like in early Earth
<b><u>Eukaryotes</u></b>	eu-: easy, good, well	All living organisms with a nucleus and sexual reproduction. More evolved than prokaryotes.
<b><u>Dinoflagellates</u></b>	dino-: terrible, fearfully, great  flagella: hair-like extensions that can be moved through the water	Fearful organism with two flagella used to move (some species are toxic and lead to harmful algal blooms)
<b><u>Diatoms</u></b>	dia-: apart, through	SiO <sub>2</sub> shells with two separate halves (they’re <i>apart</i> ) and holes that water can move <i>through</i>
<b><u>Coccolithophores</u></b>	-lith-: stone  -phore: bearer of, thing or part bearing	Autotrophic single-celled protists with calcite shells, a single flagella, and a haptoneme used to attach to large molecules. Their shells contribute to seafloor sediment that then becomes stone eventually.
<b><u>Porifera</u></b>	por-: passage  fer-: that which carries	Animal phylum: sponges with <i>passages</i> and <i>carries</i> /filters water within.
<b><u>Cnidaria</u></b>	Greek knidē nettle	Animal phylum: jellyfish, anemones, and corals with stinging cells like nettles.
<b><u>Bryozoa</u></b>	bryo-: combining form meaning moss, liverwort  -zoa: animal	small, encrusting colonial marine forms
<b><u>Mollusca</u></b>	moll-: soft	Soft-bodied, usually protected by a hard CaCO <sub>3</sub> shell.
<b><u>Lophophores</u></b>	lopho-: indicating a crested or tufted part  -phor: bear, carry	all have circular structure spirally wound and lined around entire perimeter with ciliated tentacles
<b><u>Polyplacophora</u></b>	poly-: many  -phor: bear, carry	shell with eight plates - an organism that <i>bears many</i> plates
<b><u>Gastropoda</u></b>	gastr-: stomach  -pod: foot	foot cannot attach to mud or sand, grazers, suspension feeders, predators (snails, abalones etc.)
<b><u>Bivalvia</u></b>	bi-: two	enclosed in twin (two) shells
<b><u>Cephalopoda</u></b>	cephal-: head  -pod: foot	head with foot (octopus)

<b><u>Arthropoda</u></b>	arthr-: joint -pod: foot	jointed appendages
<b><u>Annelida</u></b>	Annel-: ring	segmented bilaterally symmetrical worms – segments in rings (feather duster worm)
<b><u>Echinodermata</u></b>	echino-: a combining form meaning prickly, spiny derm-: skin	spiny-skinned, benthic, radially symmetrical (sea stars, brittle stars, sea urchins, sea cucumbers)
<b><u>Chordata</u></b>	chord-: cord	Four structures appear at some point during lifetime: notochord, dorsal, hollow nerve chord, gill slits, muscular, postanal tail
<b><u>Urochordata</u></b>	urochord- (Greek for tail or tail-like chord)  1. A flexible skeletal rod notochord that supports the posterior part of the body in some sea animals such as sea squirts. 2. The notochord (flexible rodlike structure) of an ascidian (marine animal with a saclike body and siphons through which water enters and leaves) or tunicate (marine animal with a saclike body), more conspicuous in the larva than in the adult and confined primarily to the caudal (tail or hind) region of the body.	Mostly sessile. Filter feeders. Some colonial. Covered by tunic with 2 openings: water in water out (Sea squirts, tunicates, salps)
<b><u>Reptilia</u></b>	rep-: crawl, creep	Crawling, creeping chordates (4 limbs + scales)
<b><u>Mammalia</u></b>	mamm-: breast	Warm-blooded tetrapods with young nourished from mammary glands of females.
<b><u>Cetacea</u></b>	cet-: combining form meaning whale	Fish-shaped bodies; paddle-like forelimbs and no hind limbs. Thick layer of insulating blubber. (refers to whales)
<b><u>Sirenia</u></b>	siren: any of several aquatic, eelike salamanders of the family Sirenidae, having permanent external gills, small forelimbs and no posterior limbs	Herbivores. Possess finlike forelimbs and no hind limbs. Manatees, Dugongs.
<b><u>Carnivora</u></b>	-vora: combining form meaning ones that eat carn-: flesh	Two marine families. Carnivorous. Possess sharp, pointed canine teeth and molars for shearing. Clawed toes.

Works Cited

"List of Greek and Latin Roots in English." *Wikipedia*. Wikipedia Foundation. Web. 15 Dec. 2014.  
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