

## Prefixes, Suffixes, and Stems

The following list gives the meaning of prefixes, suffixes, and stem that are commonly used to form scientific terms. Whenever you encounter a new term in your study of biology, break it apart and try to find the parts in this list. Such a habit will greatly simplify your mastery of biological vocabulary.

As an example, your might take the word *nephrology*. The stem *nephro-* is derived from the Greek word *nephros*, meaning kidney, while the stem *log-* is derived from the Greek word *logos*, meaning *thought* or *study of*. You might later encounter the word *nephrolith*, and you would then only have to determine the meaning of the suffix *-lith*, since you would already know the meaning of the first part of the word. Or when you ran across such words as *bacteriology* and *zoology*, you would probably have a good idea of what they mean. After some practice, you will be surprised how many new words you can define without looking them up.

It has often been necessary to add a vowel to combining forms for pleasing pronunciation. For example, *bacteri-+logy* becomes *bacteriology*. For the same reason it has been necessary, at times, to drop or change a vowel in a prefix, suffix, or stem. For example, *gastro* becomes *gastric*, the adjective pertaining to the stomach.

Most scientific terms are derived from either the ancient Greek or Latin because neither of these languages is used now so that they are unchanging, and also they are studied universally. As a result, you will find that Latin known endings are often used in biology.

<b>Quiz #1</b>		<b>Quiz #2</b>	
a-, an-	no; lacking; none	cell-	storeroom; chamber
ab-	away from; out from	-cene	new; recent
ac-	to; toward	centi-	hundredth
-aceus; -aceous	of or pertaining to	centr-	center
acou-	hearing	cephal-	head
acr-; acro-	extreme; peak	cervic-	neck
ad-	to; toward	chem.-	referring to chemistry
adeno-	gland	chlor-	green
agri-	field, soil	chrom-; -chrome	color
-al	having character of	chym-	juice
alb-	white	-cide	killing
-algia	pain	circum-	around; about
alto-	high	cirru-	hair like; curls
ameb-	change; alteration	co-	with; together
amphibi-	leading a double life	cocc-	seed
ampho-; amb-	both	coel-	hollow
an-	not; without	coll-	glue
ana-	up	com-	with; together
andro-	masculine; man	con-	with; together
anemo-	wind	coni-	cone
angio-	vessel	contra-	against
ante-	before; ahead of time	corp-	body
antero-	front	cosmo-	world; order; form
antho-	flower	cotyl-	cup
anti-	against	counter-	against
anthropo-	man	crypt-	hidden; covered
ap-	to; toward	-cule; -culus	added to nouns to form diminutive
aqu-	water	cucmul-	heaped
archaeo-	primitive; ancient	cuti-	skin
arthro-	joint	cyan-	dark blue
aster-; astr-	stars	-cycle; cyci-	ring; circle
-ate	used in forming verbs from nouns	cyst-	bladder; pouch
-ation	used in forming nouns from verbs	cyt-; - cyte	cell; receptacle
atom-	vapor	decty-	finger
audi-	hear		

**QUIZ #1**

**QUIZ #2**

<p>auto- bactr- barb- baro- bath- bene- bi- bio-; bi- -blast brachi- branchi- brev- bronch- calor- carb- cardi- carn- carp- carpal- caud-</p>	<p>self stick; club beard weight depth; height well; good two; twice; double life; living sprout; germ having arms having fins short windpipe heat coal; carbon heart meat fruit wrist tail</p>	<p><b>QUIZ #1</b></p>	<p>deca- deci- deliquesce- demi- dendr- dent- derm- di- dia- digit- din- dis- dorm- dors- du-; duo dynamo- dys- ec- echin- echo-</p>	<p>ten tenth become fluid half tree tooth skin two; double through; across finger; tow terrible apart; out sleep back two power ill; bad out of; outside spiny; prickly house</p>	<p><b>QUIZ #2</b></p>
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<p><b>Quiz #3</b></p>	<p><b>QUIZ #3</b></p>	<p><b>Quiz #4</b></p>	<p><b>QUIZ #4</b></p>
<p>ect- electro- en- -en encephal- end-; ent- enter- -eous epi- -err erythro- ethno- eu- extra- ex- -fer ferro- fibr- -fid; fis- -flect; -flex flor- fluor- foli- fract- galact-; galax- gastro- geo- -gen; -gine -gene; gene- -gest glob- glottis -gon -gony</p>	<p>outside; without electric; electricity in; into made of brain within; in intestines nature of; like on; above wander; go astray red race; people well; good beyond; outside of out of bear; carry; produce iron fiber; thread divide into; split bend flower fluorine leaf break milk, milky fluid stomach land; earth producer; former origin carry; produce ball; round mouth of windpipes angle; corner offspring; generation; coming into</p>	<p>hipp- hist- holo- homo- homo- hort- hybrid hydr- hygr- hypo- hyper- hypho- hypno- -ic ichthy- ign- im- in- in- -ine infro- inter- intra- -ion -ism iso- -it is kilo- lachry- lact- lat- -less leuc- lign-</p>	<p>horse tissue entire; whole man same; alike garden mongrel water wet; moist beneath; under; less above; beyond; over weaving sleep added to nouns to form adjectives fish fire not to; toward; into not of or pertaining to below; beneath between within; inside go; come a state or condition equal; same inflammation disease thousand tear milk side; flank without light; bright; white wood</p>

<p>-grade -gram -graphy; -graph grav- gross- gymno- gyn- haem-; hem hepat- herb- hetero- hex- hibern</p> <p>being step; division writing; record writing; record heavy thick naked female blood liver grass different; other six winter</p>	<p>lin- lingu- liqu- lip- lith-; -lite loc- -logy -lysis; -lyte; -lyst macr- mal- malle- mamm- marg- mast- med- meg- mela-; melan- mes- met-; meta- meteor- meter; -metry metro-</p> <p>line tongue become fluid; liquid fat stone; petrifying place study</p> <p>dissolve; decompose large bad; evil hammer breast boarder; edge breast middle great; million black; dark middle; half; intermediate between; along; after lofty; high; in air way of measuring; instrument for measuring uterus</p>
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**QUIZ #3**

**QUIZ #4**

<p><b>Quiz #5</b></p> <p>micro- milli- mis- mito- mole- mono- mont- mort- mov-; -mot morph- multi- mycel- mycet- myria- moll- nas- nemat- neo- nephro- -ner- neur-; nerv noct-; nox -node -nomy; -nome non- not- nuc- ob- ocul- oct-</p> <p>small thousandth wrong; incorrect thread; filament mass one; single mountain death move shape; form many threadlike fungus many soft nose thread new; recent kidney moist; liquid nerve; tendon night knot distribute; arrange; law not back center against eye eight</p>	<p><b>Quiz #6</b></p> <p>per- permea- phag- phenol- phil- phon-; -phone -phore photo- phyc- -phyll physic- -phte; phyt plan- plasm-; -plast pleur- pneumo- -pod poly- por- port- post- pom- pre- pro- procto- proto- pseudo- pter- pulmo- puls-</p> <p>through pass; go eat show living; fond of sound bearer light seaweed; algae leaf nature; natural qualities plant roaming; wandering form; formed into rib; lung lungs; air foot many; several opening carry after; behind fruit before; ahead of time forward; favoring rectum; anus first; primary false, deceptive having wings or fins lung drive; push</p>
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**QUIZ #5**

**QUIZ #6**

odont- -oid olf- omni- oo- opthal- opt-; opsy orb- orth- oscu- oste- -ous ov- oxy- pachy- paleo- palm- pan- par- path-; -pathy -ped pent-	tooth like in form or shape smell all egg eye eye; vision circle; round; ring straight; correct; right mouth bone full of; abounding in egg sharp; acid; oxygen thick old; ancient broad; flat all beside; near; equal; bring forth disease; suffering foot five	<b>QUIZ #5</b>	pyr- quadr- quin- radi-  re- rect- ren- ret- rhin- rhiz- rubr- saccharo- sapr- saur- sclera- sci- scope- -scribe; script semi-	heat; fire four; four fold five ray; spoke of a wheel; energy in rays again; back correct; right kidney net; made like a net nose root red sugar rotten lizard hard know look; observe write half; partly	<b>QUIZ #6</b>
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<b>Quiz #7</b>					
sept- septic sex- -sis sol- solv- somm- son- spec-; spic- sperm- sphere- -spire spore stat- stell- stern- stom-; stome- strat- stereo- strict- styl- sub- super- sur- sym-; syn- tachy- tarso- tax- tele- terr-	partition; seven putrefaction; infection six condition; state sun loosed; free sleep sound look at seed ball breathe seed standing; placed stars breast; chest mouth layer solid; three dimensions drawn tight pillar under; below over; above; on top over; above; on top together quick; swift ankle arrangement far off; at a distance earth	<b>QUIZ #7</b>	tetr- thall- therm- -tom toxico- top- trans- tri- trich- troph- trop- -ule ultra- ur- vas- vect- ven-; vent ventr- vice- vig- vit-; viv- volv- vor- xanthin- zo-; -zoa zyg- zym-	four young shoot heat cut; slice poison place across three hair one who feeds; well fed turning; changing diminutive beyond urine vessel carry come belly in place of strong life roll; wander devour; eat yellow animal yolk yeast	<b>QUIZ #7</b>