

HONORS BIOLOGY ROOT WORDS

To learn Biology, you must be able to understand many unfamiliar, difficult terms. Nearly all of these terms are derived from Latin and Greek word parts. These words parts include roots (core part), prefixes (beginning part), and suffixes (end part). But for sake of simplicity, we will refer to all word parts as “roots”. Roots are the building blocks that join together to construct words. Each root has a specific meaning and they combine together to form words. Learning these meanings will greatly help you to understand scientific terminology.

Group 1 a-; an- ab- -able ac-, ad- , at- -aceous aero- agri- -al alb- amphi-; ambi ana- andr(o)- angio- anter- anti- anthropo-	not; without; lacking away from; out from capable of to; toward of or pertaining to air field; soil having the character of white both away; up; back; again man; masculine vessel, duct front against; opposite man; human	Group 4 -chem- chlor(o)- chondr(o)- chrom-; -chrome chron(o)- -cid-; -cis- circum- co-; com-; con-; cor- con- contra-; counter- corp- crani- -cul-; -cule cuti- -cycle; cycl- -cyst- cyt-; -cyte	dealing with chemicals green cartilage color time cut; kill; fall around; about with; together cone against body skull small; diminutive skin ring; circle sac; pouch cell; hollow container
Group 2 aqu- arachni- archaeo- arteri- arthr- -ary; -arium -ase -asis astro- -ate; -ation audi- auto- avi- baro- bi- (Latin) bi; bio- (Greek)	water spider primitive; ancient artery joint; articulation a place for; related to enzyme state or condition star the act of hear self bird pressure two; twice life; living	Group 5 -dactyl-; digit- de- deca-; deka- deci- (Latin) dendr- dent-; -odont -derm- di-; dipl- ; du- di-; dia- di-; dis-; dif- dorm- dors- -duc-; -duct- dys-	finger; toe away from; down ten tenth; ten tree; branching tooth; teeth skin two; double through; across apart; separate sleep back to lead bad; abnormal; difficult; ill
Group 3 brachi- -brev- bronch- calor- carcin- cardi- carn- carpal- cata- -cell- cen-; -cene cent(i)- centr- -cephal- cervi-	arm short windpipe heat cancer heart meat; flesh wrist breakdown; downward chamber; small room now; recent hundred(th) center head neck	Group 6 ec-; ecto- eco- en-; endo-; ent-; eso- entom(o)- epi- erythro- eu- ex-; exo- extra- fibr-; fil- -fid; fiss- -flect; -flex flor- flu-; fluct-; -flux- -form- fract- ; frag-	out of; away from; outside of environment; habitat in; into; within; inner insects upon; above; over red well; good; true; normal out of; away from beyond; outside fiber; thread split; divided into bend flower flow shape break

Group 7	-gam- gastr(o)- geo- -gen; -genic -gene- -gest- gluc-; glyc- -gon -grad-; -gree; -gress -gram; -graph -grav- gymno- gyn(o)-; gyne-	marriage stomach land; earth producer; cause origin; birth; descent carry; produce sweet; sugar angle; corner step record; writing heavy naked; bare female	Group 11	macr(o)- mal- mamm-; mast- marg- mega- mela-; melan- men(o)- -mer mes(o)- met-; meta- -meter; -metry micro- milli- mis-	large bad, evil breast border; edge million; great black; dark month part middle; intermediate between; along; after measurement small; millionth thousandth wrong; incorrect
Group 8	-hal-; -hale hapl- hem- ; -emia hemi- hepat- herpet- herb- hetero- hex- hist- homo- ; -hum- homo-; homeo- hydr(o)- hyper- hypo-	breathe; breath single single half liver reptile grass; plants different; other six tissue; woven man; human same; alike water above; beyond; over below; under; less	Group 12	mon(o)- mort- -mot- morph- multi- mut- my(o)- myc(o)- -moll- narc- nas(o)- necr(o)- neo- neph(r)o)- neur-	one; single death move shape; form; structure many change muscle fungus soft to numb; deaden nose dead; corpse new; recent kidney nerve
Group 9	-ia; -ism -iac ichthy- ign- in-; il-; im-; ir- -in(e) infra-; infer- inter- intra- iso- -ist -itis -ium	state; condition person afflicted with disease fish fire; burn not; toward, into, within of or pertaining to; made of below; beneath between within; inside equal; same person who deals with... inflammation; disease body part; type of element	Group 13	noct-; nox- -nom-; -nomy non- nuc- ob- ocul-; opt-; -opia oct- -oid olf-; olfact- -oma; onc(o)- omni- oo-; ov-; o- ora- orb- ornith- orth-	night name; arrangement not center against eye eight form; shape; appearance smell tumor; growth; cancer all egg mouth circle; round; ring bird straight; correct; right
Group 10	-kary- kilo- kine- lact- lat- -less leuc-; leuk- liga- lingu- lip(o)- loc- -(o)logist -(o)logy -lumin- -lys-; -lyt-; -lyst	cell nucleus; body thousand move milk side without white to bind tongue fat place one who studies... the study of... light; bright decompose; split; dissolve	Group 14	-ose -osis oste(o)- -ous; -ious oxy- paleo- pan- par-; para- path-; -pathy paed-; ped- (Greek) -ped-; -pod (Latin) pent- per- peri-	sugar; carbohydrate abnormal condition bone full of sharp; acute, acid, oxygen old; ancient all beside; near; equal disease; suffering child; children foot; feet five through around

Group 15 -phase
phag(o)-
phen(o)-
-phil-
-phobia; -phobic
phon-; -phone
photo-
-phyll
physi-
phyt(o)-; -phyte
-plasm-; -plast-
plat(y)-
pneumo-; pulmo-
poly-
por-
post-

stage; condition
eat
show
loving; fond of
fear; hate; dread
sound
light
leaf
nature; natural
plant
form; formed into
flat
lung; rib; air
many; several
opening
after; behind

Group 18 spec-; spic-
-sperm-; -spor-
-spher-
spir-; -spire
stat-; -stasis
stern-
stom-; -stome
strat-
-strict-
stereo-
sub-
super-; supra-; sur-
sym-; syn-

look at
seed
ball; round
breathe
standing; staying
chest
mouth
layer
to draw tight
solid; 3-dimensional
under; below
over; above; on top
together

Group 16 pre-
prim-; proto-
pro-
pseud(o)-
psych(o)-
-puls-
pyr-
quadr-
quin-
re-
ren-
rhin(o)-
-sacchar-
-saur-

before; prior to
first; primary
forward; favoring; before
false; deceptive
mind
drive; push
heat; fire
four
five
again; back
kidney
nose
sugar; sweet
lizard

Group 19 tachy-
tax-
tele-
telo-
-terr-
tetr-
-therm-
-thorac-
-tom-; -tomy
tox(ico)-
trache(o)-
trans-
tri-
trich-
-trop-
-troph-

quick; swift
arrange; put in order
far off; distant
end
earth; land
four
heat
chest
cut; split
poison
windpipe
across
three
hair
turn; change
nourishment; feed

Group 17 -sci-
-sclero-
-scop-
-scribe; -script-
-sect-
semi-
sept-
-septic-
sex-
-sis ; -osis
sol-
-solv-
somat-; -some
-somm-
son-

know
hard
look; observe
write
cut
half; partly
partition; seven
infection
six
condition; state
sun
loosen; free
body
sleep
sound

Group 20 -ul-; -ule
ultra-
uni-
vas(o)-
ventr-
-verge
vig-
vit-; viv-
-volv-
-vor-
xanth-
zo-; -zoa
zyg(o)-

small; diminutive
beyond
one
vessel
belly; underside
turn; slant
strong
life; alive
change; turn; roll
devour; eat
yellow
animal
joined together; yolk