

# Affixes Latin Roots Greek Combining Forms Grades 3 – 8

Fall 2007-2008

# Reading Strand 1, Concept 4 Vocabulary

Grade 3: Use knowledge of prefixes and suffixes to determine the meaning of words.

Grades 4 and 5: Use knowledge of root words and affixes to determine the meaning of unknown words.

Grade 6: Determine the effect of affixes on root words

Grades 7 and 8: Determine the meaning of vocabulary using linguistic roots and affixes.

Prefixes	3 <sup>RD</sup>	4 <sup>TH</sup>	5 <sup>TH</sup>	6 <sup>TH</sup>	7 <sup>TH</sup>	8 <sup>TH</sup>	Suffixes	3 <sup>RD</sup>	4 <sup>TH</sup>	5 <sup>TH</sup>	6 <sup>TH</sup>	7 <sup>TH</sup>	8 <sup>TH</sup>
un- (not or undo)	I	R	М				-ful	I	R	М			
re- (again or back)	I	R	M				-ly	I	R	M			
dis- (opposite, not)	I	R	М				-er, -or	I	R	М			
pre- (before)	I	R	Μ				-ed	I	R	М			
post- (after)	I	R	M				-est	I	R	М			
in- (not, in or on)	I	R	M				-less	I	R	M			
im- (not, in or on)	I	R	M				-S	I	R	M			
dif- (not)		I	R	M			-ful	I	R	M			
mid- (middle)		I	R	M			-ing	I	R	M			
ex- (out)		I	R	M			-tion, -sion	I	R	M			
sub-(under)		I	R	M			-able,	I	R	M			
pro- (forward)		I	R	M			-y		Ι	R	М		
dec-, deca-, deci- (ten)		I	R	Μ			-dom		l	R	M		
cent-, hect- (hundred)		I	R	М			-ment		I	R	M		
milli-, kilo-, (thousand)		I	R	М			-ness		I	R	M		
semi-, hemi-, or demi- (half)		I	R	М			-ism		I	R	M		
poly- (many)		I	R	M			-le			ı	R	М	
uni- (one)		I	R	М			-ible			I	R	М	
tri- (three)		I	R	М			-ous			I	R	М	
quad-, quar- (four)		I	R	М			-ist			I	R	М	
pent- (five)		I	R	М			-or			I	R	М	
oct- (eight)		I	R	М			-ile				I	R	М
non- (not or negative)		I	R	M		_	-ion		_		I	R	М

Prefixes	3 <sup>RD</sup>	4 <sup>TH</sup>	5 <sup>TH</sup>	6 <sup>TH</sup>	7 <sup>TH</sup>	8 <sup>TH</sup>	Suffixes	3 <sup>RD</sup>	4 <sup>TH</sup>	5 <sup>TH</sup>	6 <sup>TH</sup>	<b>7</b> <sup>TH</sup>	8 <sup>TH</sup>
il- (not, in or on)			ı	R	M		-ant, -ent				I	R	М
de-(from/down)			ı	R	M		-ish				I	R	М
super-(more than)			I	R	M		-ship				I	R	М
multi- (many)			_	R	M		-age				I	R	M
con-,com-, co-, col-, cor- (with)			-	R	М		-ic					Ι	R
anti- (against)			- 1	R	M		-arium					I	R
mono- (one, single)			I	R	M		-ive,					I	R
di-, bi-, duo- (two)			- 1	R	M		-al, ial					I	R
tele- (distant)			ı	R	M		-ward					ı	R
mis- (bad)			ı	R	M		-wise					ı	R
sex-, hex- (six)			I	R	М		-ure					I	R
sept-, hept-,(seven)			I	R	M		-ity					I	R
trans- (across or beyond)			I	R	M		-ary					I	R
circum-(around)			I	R	M		-ant, -ent					I	R
inter- (between)			I	R	M		-ance, ence					I	R
intra- (within)			ı	R	M								
intro- (inward)			ı	R	M								
mal- (bad)				ı	R	М							
ir- (not, in or on)				1	R	M							
macro- (large)				ı	R	М							
micro- (small)				ı	R	М							
non- (nine)				1	R	М							
mega- (large, million)				ı	R	M							
contra- (against)				ı	R	M							
counter- (opposite)				ı	R	M							
bene-(well or good)				ı	R	М							
omni– (all)				ı	R	М							
neo – (new)				I	R	М							
tetra- (four)					I	R							
quint- (five)					Ι	R							
giga- (billion)					I	R							

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nano- (billion)					I	R							
ante- (before)					I	R							
hypo— (under, below, too little)					I	R							
ambi- (both)					I	R							
meta- (beside)					I	R							
para- (beside)					I	R							
ob- (down, facing against, or to)					I	R							
ad- (to)						I							
hetero-(different)						I							
syn- (together)						I							
sym- (together)						- 1							
pan- (all)						- 1							
per- (throughout)						- 1							
peri- (all around, near)						I							
retro- (back)						- 1							
ab- (away from)						-							
be- (completely)						I							
en- (within)						I							
dys- (difficult)						- 1							
proto- (earliest)						1							

Root	Meaning	Examples	3 <sup>RD</sup>	4 <sup>TH</sup>	5 <sup>TH</sup>	6 <sup>TH</sup>	<b>7</b> <sup>TH</sup>	8 <sup>TH</sup>
form	to shape	formal, formula, inform, perform, uniform			R	М		
port	to carry	airport, import, export, portal, report, support		_	R	М		
rupt	to break or burst	bankrupt, corrupt, disrupt, erupt, interrupt, rupture, abrupt		_	R	M		
tract	to draw or pull	attract, contract, tractor, extract, subtraction, protractor, traction		_	R	M		
scrib script	to write	scribble, scripture, describe, prescription		I	R	M		
act	action, doing	action, activity, actor, actually, enact			R	M		
numer	number	numeral, numerator, numerous, enumerate			R	M		
speci	particular type or kind	special, specific, specify, species, specimen			I	R	M	
spec spect	to see, watch or observe	suspect, spectator, respect, expect			I	R	M	
stru struct	to build	construct, instructions, superstructure, instrument			I	R	M	
dic dict	to say or tell	predict, verdict, dedicate, dictionary			I	R	M	
flect, flex	to bend or curve	reflex, flexible, reflect			I	R	M	
mit, miss	to send	mission, intermission, emissary, permission, emit			I	R	M	
sens	feel, sense, become aware of	sense, sensitive, sensation, extrasensory, sensible			l	R	M	
deli	pleasant	delight, delicatessen, delicious, delicate			1	R	М	
offic	duty, work	office, officer, official, officiate			I	R	М	
class	group, class	classic, classical, classify			Ī	R	М	
organ	tool, instrument	organize, organist, organism, organic			I	R	M	
prob	test, prove	probe, probable, probability			I	R	М	

Root	Meaning	Examples	3 <sup>RD</sup>	4 <sup>TH</sup>	5 <sup>TH</sup>	6 <sup>TH</sup>	<b>7</b> <sup>TH</sup>	8 <sup>TH</sup>
loc	place	local, location, locomotion			I	R	М	
equ	same, even	equal, equator, equivalent			I	R	М	
metr	measurement	meter, metric, diameter, metronome,			I	R	М	
		perimeter, symmetrical						
frac, frag	to crack, break				I	R	М	
cred	to believe	credential, credit, incredible			I	R	М	
duc, duce, duct	to lead	conductor, education, produce, viaduct			I	R	M	
pel, puls	to drive or push	compulsive, repulsion, repel, pulse, expel			I	R	M	
vers, vert	to turn	conversation, convertible, universal			I	R	M	
serv	to help, serve	service, servant, undeserved			I	R	М	
vari	different, changing	variable, variety, various, invariably			I	R	M	
fin	end	finish, finale, finite, finalist, confine				I	R	М
famil	household, closely known	family, familiar				I	R	M
pend,	to hang or	suspend, expense, dispenser, dependable,				I	R	М
pens	weigh	suspenders, suspense, pendulum						
circ	around	circle, circus, circuit, circulate				I	R	М
jac, jec,	to throw or	ejection, reject, adjective, adjacent				I	R	М
ject	lie					_	_	
aqua	water	aquarium, Aquarius, aqueduct, aquatic				l	R	M
terr	land	terrace, territory, Mediterranean, terrain, extraterrestrial				I	R	M
tend,	to stretch or	extension, tendon, intense, attention				I	R	M
tens,	strain							
tent								
ques	to ask, search	question, quest, inquest, questionnaire				I	R	M

Root	Meaning	Examples	3 <sup>RD</sup>	4 <sup>TH</sup>	5 <sup>TH</sup>	6 <sup>TH</sup>	7 <sup>TH</sup>	8 <sup>TH</sup>
part	separate piece	partial, partner, particle, department, participate				I	R	M
cur, curs	to run or go	current, currency, occurrence, curriculum				I	R	М
studi	learn, study	student, studiousness, studio, understudy				I	R	М
ped, pod	foot	pedestrian, millipede, expedition, pedicure podiatrist, podium, tripod, orthopedics				I	R	М
vid, vis	to see	visionary, television, improvise, supervision				I	R	M
aud	hear, listen	audible, audition, auditorium, audit				I	R	М
vit, vita, viv, vivi	to live	Vitamin, revive, survival, vivacious				I	R	M
leg	law	legal, privilege, legitimate, legislature				I	R	М
greg	group, crowd, flock or herd; to assemble	segregate, aggregate, congregation,					I	R
capit, capt	head or chief	captain, capital, decapitate, per capita					I	R
spir, spire	to breathe	perspiration, spirit, uninspiring, respirator					I	R
cap, ceit, ceive, cep, cept, cip	to take, catch, seize, hold, or receive	interception, deceive, emancipation, capacity, participation, accept, capture, captivate, captivity					I	R
grad, gred, gress	step, degree, to walk	grade, graduate, regression, centigrade, digress, gradual					I	R
fer	to bear or yield	different, referee, transfer, fertilize					I	R
voc, vok, voke	to call	vocabulary, provoke, vocalist, advocacy					I	R
lect, leg, lig	to choose, pick, read, or speak	lectern, selection, lecturer, legend, elect					I	R

Root	Meaning	Examples	3 <sup>RD</sup>	4 <sup>TH</sup>	5 <sup>TH</sup>	6 <sup>TH</sup>	<b>7</b> <sup>TH</sup>	8 <sup>TH</sup>
lit, liter, litera	letters	literature, illiterate, alliteration, obliterate					I	R
grat	thankful	grateful, gratitude, gratuity, ungrateful						R
cede, ceed, cess	to go, yield, or surrender	inaccessible, process, necessary, concede, concession					I	R
bas	foundation, low part	bass, basement, basis, basic					I	R
ten, tain, tent	to hold or to have	entertainer, tenacity, sustain, detention					I	R
civi	citizen, member of a city	civics, civilian, uncivilized, civilization					I	R
feder, fid, fide, feal	trust or faith	affidavit, confidence, fidelity, federal					I	R
sist, sta, stat, stit	to stand, standing position, state or condition	state, stationary, statement, status, statue, stance, distance, substantial, obstacle, persist, consistent, assist, stamina, standard						_
cad, cas, cid	to fall or befall	accident, coincide, cadence, incidental						I
pon, pos,pose, pound	to put, place, or set	opposition, propose, purpose, compound, component, compose, opponent, deposit, pose, posture, exposure, position						_
cern	to separate	concern, discern						I
cert	to decide	certify, certification, certainly, ascertain						I
mob, mot,	to move, to do	mobility, promotion, emotional, automobile, motel, motion, motivate, motor						I
gen, genus	race, kind, or species; birth	genocide, regenerate, gender, indigenous, generation						I
cise	to cut	incisor, precision, scissors, decision						I

Root	Meaning	Examples	3 <sup>RD</sup>	4 <sup>TH</sup>	5 <sup>TH</sup>	6 <sup>TH</sup>	<b>7</b> <sup>TH</sup>	8 <sup>TH</sup>
plic, ply	to fold	comply, complicate, imply, implicit,						I
		replicate, apply						

Greek Combining Form	Meaning	Examples	3 <sup>RD</sup>	4 <sup>TH</sup>	5 <sup>TH</sup>	6 <sup>TH</sup>	7 <sup>TH</sup>	8 <sup>TH</sup>
tele	distant, far away	telephone, telescope, telemarket, television		I	R	М		
phon phono	sound	phonics, phonograph, telephone, xylophone, symphony, microphone		Ι	R	М		
photo	light	photographer, telephoto, photocopy		I	R	М		
gram, graph	written or drawn	autograph, biography, telegram, paragraph, tangram		I	R	М		
auto	self	autograph, automobile, automatic		I	R	М		
meter	measure	meter, geometry, perimeter speedometer		I	R	М		
therm thermo	heat or hot	thermometer, Thermos, thermostat, thermal		I	R	M		
geo	earth	geography, geology, geometry,		I	R	М		
saur	lizard	dinosaur, stegosaurus, tyrannosaurus			R	M		
eco	house, home	ecology, economics, ecosystem, ecoterrorism		1	R	M		
sphere	circle	hemisphere, atmosphere, spherical		I	R	М		
scope	watch, see	telescope, microscope, microscopic			Į	R	М	
bio	life	biology, biosphere, biography, antibiotics, biohazard			I	R	M	
logy, ology	science or study of	biology, mythology, zoology, astrology, ecology, phonology			I	R	М	
astro, astr	star	astrology, asterisk, disaster, Astros, astronaut, astronomy, asteroid			I	R	M	
cycl	wheel, circle	bicycle, Cyclops, cyclical, cyclone			I	R	М	
nym	name or	acronym, synonym, anonymous, pseudonym				I	R	М

	word							
Greek Combining Form	Meaning	Examples	3 <sup>RD</sup>	4 <sup>TH</sup>	5 <sup>TH</sup>	6 <sup>TH</sup>	7 <sup>TH</sup>	8 <sup>TH</sup>
dyn	power, strength	dinosaur, dynamic, dynamite, dynamo				I	R	M
ortho	straight	orthodontist, orthopedics, orthodox,				I	R	М
dem, demo	people	democrat, demographics, pandemic				I	R	М
cracy, crat	rule	aristocrat, democracy, bureaucrat				ı	R	М
pol, polis, polit	city; method of government	police, policy, political, Minneapolis, Acropolis				I	R	M
arch	chief, ruler	matriarch, monarchy, architecture, anarchy				ı	R	М
derm	skin	dermatologist, epidermis, hypodermic, taxidermy, pachyderm				I	R	М
chron	time	chronology, chronic, synchronize				1	R	М
techn	skill, craft	technology, technique, technician, Technicolor, technical				I	R	М
biblio	book	bibliography, biblical				I	R	М
log, logo	speech or word	logic, catalogue, eulogy, dialogue, travelogue					I	R
phys	nature	physical, physician, physique, physicist					I	R
ZO, ZOO	animal	zoology, Zodiac, Mesozoic, protozoan					I	R
pneumo	lungs, air	pneumonia, pneumatology, pneumatic						I
anthro, andr	man	anthropology, android, philander						I
phil	love or affinity	philosophy, philander, Philadelphia, bibliophile, philharmonic,						I
phobia	irrational fear	claustrophobia, arachnophobia, hydrophobia						I
chrome	color	chromosome, chrome, monochrome						I
hydr, hydra, hydro	water	hydrogen, dehydration, hydraulic, hydrant						I

Greek	Meaning	Examples	3 <sup>RD</sup>	4 <sup>TH</sup>	5 <sup>TH</sup>	6 <sup>TH</sup>	<b>7</b> <sup>TH</sup>	8 <sup>TH</sup>
Combining								
Form								
the, theo	god	theology, atheist, theocracy, theologian						I
hypo	under	hypodermic, hypothesis, hypocrite, hyphen						I
mono	one	monarchy, monastery						I

## Reading Strand 1, Concept 4 Vocabulary

Grade 3: Use knowledge of prefixes and suffixes to determine the meaning of words.

Grades 4 and 5: Use knowledge of root words and affixes to determine the meaning of unknown words.

Grade 6: Determine the effect of affixes on root words

Grades 7 and 8: Determine the meaning of vocabulary using linguistic roots and affixes.

### Sample Latin Root Word Lesson:

Opening – Remind students that the root is the main part of the word, the part to which prefixes and suffixes are added. The root usually receives the accent or stress in a Latin-based word. Thousands of words – more than half of the words in the dictionary – come from Latin roots. Each root has a specific meaning; the meaning is changed by adding prefixes and suffixes.

Middle - The Latin Root Word 'struct' means to build. With a partner, build as many words as you can using the Latin Root Word 'struct'. Provide a chart similar to the one below and allow pairs of students to build words, recording the words in a list. As the students work, move between groups reminding them to stress or accent the root word. Ask what they might predict a word might mean. Challenge students to use words from their lists in sentences.

re de	con			s ed							
ue				ng							
			ive	ľ	y						
d	e		or	,	6						
i	n	struct		5	6						
0	b		ion	ism							
SU	ub			is	st						
su	oer			S							
inf	fra	ure		lire		lira		uro		е	d
			uie	in	ıg						
				al	ly						

Closing – Share examples of words that pairs built. Share examples of student generated meaning predictions and sentences that the teacher collected as the students were working.

Follow-up – Point out examples of words based on the root 'struct' as they are encountered in print.

### Sample Latin Root Word Lesson:

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Middle - Post the following list of words:

rupture abruptly erupt eruption abrupt interrupting interruption disruptive corrupt bankrupt

Ask students to determine the root word (rupt). Lead students to understand that the meaning of 'rupt' is to break or to burst.

Closing – Ask students to construct 3 sentences using words with the root word 'rupt' in sentences that contain context clues as to the meaning of the word. (e.g., The teacher was interrupted when a student broke into her conversation with the principal.)

Follow-up – Point out examples of words based on the root 'rupt' as they are encountered in print.

### Sample Greek Combining Form Lesson:

Opening – Remind students that words of Greek origin are often used in science classes and textbooks. Sometimes these Greek word parts are called roots. However, because some of these Greek word parts may also be compounded with another word part, they are also referred to as Greek combining forms (e.g., auto and graph are both Greek word parts that can be combined to form the word autograph. Both might be considered roots, or auto could be a prefix to graph, or graph could be a suffix to auto.)

Middle – Write 4 - 7 appropriate common Greek word parts on the board or an overhead. For example:

auto (meaning self) phono (meaning sound) photo (meaning light) tele (meaning distant) graph (meaning written) gram (meaning written) meter (meaning measure) ology (meaning study of) sphere (meaning circle) geo (meaning earth) saur (meaning lizard)

Explain that words containing ph (as in physician), ch (as in chemistry), y as a medial vowel (as in hydrogen and synonym), silent p (as in pneumonia, pterodactyl, psychology), rh (such as rhombus), x pronounced as z/z (such as xylophone), z/z (such as mnemonics) are of Greek origin.

Ask students to use their own knowledge, their science textbook, classroom library resources, and the dictionary to locate words with the posted word parts or containing spellings such as those identified above. Record the words on a list and predict their meanings based on their understanding of the meaning of the Greek word part.

Ask students to build real and imaginary words using Greek word parts. (i.e., bibliosaur – a book loving dinosaur)

Closing – Using examples from the lists of actual words found in texts and examples from the student-created imaginary words, play a game of stump the students. Is this a real word or a made-up word?

Follow-up – Point out examples of words based on Greek combining forms or spellings as they are encountered in print.

### General strategies for supporting instruction of affixes, root words and combining forms:

Word walls

Vocabulary notebooks

Breaking words into morphemes: reconstructionist reconstruction ist

Use words in context

Make word webs with a Latin root word (or Greek combining form, prefix, suffix) at the hub.

Adapt word games such as Concentration, Jeopardy, Wheel of Fortune, Charades

Write root words (or Greek combining form, prefix, suffix) on index cards. Add additional words containing the root as they are encountered in conversation or text.

Relate unfamiliar words to familiar words to determine meaning. (i.e., The king was a tyrant. What's a tyrant? Well, we know that a tyrannosaurus means terrible lizard. Do you think that a king who is a tyrant would be a nice guy or a mean guy? A tyrannosaurus is a scary dinosaur so a tyrant must be someone mean.)

http://www.etymonline.com

http://www.espindle.org/roots.html

http://www.guia.com/jg/65969.html

http://edhelper.com/Word\_Roots.htm

http://www.readskill.com/Resources/TipsForTeachers/TipsVocabulary.htm