



Deer Valley Unified School District No. 97

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 RD	4 TH	5 TH	6 TH	7 TH	8 TH	Suffixes	3 RD	4 TH	5 TH	6 TH	7 TH	8 TH
un- (not or undo)	I	R	M				-ful	I	R	M			
re- (again or back)	I	R	M				-ly	I	R	M			
dis- (opposite, not)	I	R	M				-er, -or	I	R	M			
pre- (before)	I	R	M				-ed	I	R	M			
post- (after)	I	R	M				-est	I	R	M			
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		I	R	M		
dec-, deca-, deci- (ten)		I	R	M			-dom		I	R	M		
cent-, hect- (hundred)		I	R	M			-ment		I	R	M		
milli-, kilo-, (thousand)		I	R	M			-ness		I	R	M		
semi-, hemi-, or demi- (half)		I	R	M			-ism		I	R	M		
poly- (many)		I	R	M			-le			I	R	M	
uni- (one)		I	R	M			-ible			I	R	M	
tri- (three)		I	R	M			-ous			I	R	M	
quad-, quar- (four)		I	R	M			-ist			I	R	M	
pent- (five)		I	R	M			-or			I	R	M	
oct- (eight)		I	R	M			-ile				I	R	M
non- (not or negative)		I	R	M			-ion				I	R	M

Prefixes	3 RD	4 TH	5 TH	6 TH	7 TH	8 TH	Suffixes	3 RD	4 TH	5 TH	6 TH	7 TH	8 TH
il- (not, in or on)			I	R	M		-ant, -ent				I	R	M
de-(from/down)			I	R	M		-ish				I	R	M
super-(more than)			I	R	M		-ship				I	R	M
multi- (many)			I	R	M		-age				I	R	M
con-,com-, co-, col-, cor- (with)			I	R	M		-ic					I	R
anti- (against)			I	R	M		-arium					I	R
mono- (one, single)			I	R	M		-ive,					I	R
di-, bi-, duo- (two)			I	R	M		-al, ial					I	R
tele- (distant)			I	R	M		-ward					I	R
mis- (bad)			I	R	M		-wise					I	R
sex-, hex- (six)			I	R	M		-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)			I	R	M								
intro- (inward)			I	R	M								
mal- (bad)				I	R	M							
ir- (not, in or on)				I	R	M							
macro- (large)				I	R	M							
micro- (small)				I	R	M							
non- (nine)				I	R	M							
mega- (large, million)				I	R	M							
contra- (against)				I	R	M							
counter- (opposite)				I	R	M							
bene-(well or good)				I	R	M							
omni- (all)				I	R	M							
neo - (new)				I	R	M							
tetra- (four)					I	R							
quint- (five)					I	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)						I							
pan- (all)						I							
per- (throughout)						I							
peri- (all around, near)						I							
retro- (back)						I							
ab- (away from)						I							
be- (completely)						I							
en- (within)						I							
dys- (difficult)						I							
proto- (earliest)						I							

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

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

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

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

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

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

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

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

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	struct	s	
				ed	
				ing	
				ive	ly
				or	s
				ion	ism
					ist
				ure	s
				ed	
				ing	
				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:

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 - 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)
biblio (meaning book)	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/* (such as xylophone), *mn* (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 (re) (con) (struc) (tion) (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.quia.com/jg/65969.html>

http://edhelper.com/Word_Roots.htm

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