

Building Vocabulary through Morphemes: Using Word Parts to Unlock Meaning

By Alice Thomas

Direct instruction of the most common morphemes (prefixes, suffixes, and root words) can greatly enhance and build the vocabulary and reading comprehension of all students, especially struggling readers. Once students become familiar with the most common morphemes, they can then use their knowledge of word parts to help determine meaning when they encounter unknown words.

Morphemes, the smallest units of a word that have meaning, are commonly divided into prefixes, suffixes, and root words. The word *misspelled*, for example, is comprised of three morphemes: the prefix *mis-*, the base word *spell*, and the suffix *-ed*.

Because some students may not realize that they can use their knowledge about how to divide words into parts to gain word meanings, it is important to provide direct instruction to ensure that students develop their ability to analyze the structure of multisyllabic words. Struggling readers, and students with learning disabilities in particular, may be lacking in word analysis skills.

We have scientific evidence that teaching morphemes to students increases vocabulary and reading comprehension. In one study, third graders who were given training on the nine most common prefixes and a strategy for decomposing words into roots and suffixes outperformed a control group on several measures of word meanings (White, Sowell and Yanagihara, 1989). Researchers concluded that teaching at least the top nine prefixes, if not all 20, to middle school students would pay dividends in increased vocabulary learning.

It is never too early to introduce students to meaningful word parts. For example, teachers of pre-kindergarten students can readily point out the meaning of the prefix *pre-*, meaning “before” to their students, as in *pre-kindergarten*, *prevent*, and *preview*. Further, pre-kindergarten students can easily grasp the meaning of *un-*, meaning “not”, as in *untied* (“My shoe came untied”), *uncover*, *unlock* and *unsafe*.

Students in lower elementary school can be taught to add prefixes and suffixes to short Anglo-Saxon base words and discuss the meaning. Teachers can start the thought process of combining by having students identify and then form compound words (e.g., *football*, *cupcake*) and then move students to affixing prefixes and suffixes to base words, such as “view”: *preview*, *review*, *viewed*, *viewing*, and *viewer*.

Students in upper elementary school and the secondary grades will benefit as they learn the meanings of additional affixes and common Latin and Greek roots. For example, knowing that *spect* comes from Latin and means “to see, to watch” will help students to understand the meaning of *inspect*, *inspector*, *spectator*, *introspective* and *spectacles*. Knowing the Greek root *graph*, meaning “to write” or “to draw” opens the reader to multiple words such as *autograph*, *photograph*, *telegraph*, *lithograph*, *biography*, and *graphite*. Knowing that “bio” means “life” will help them to unlock the meaning of *biology*, *biography*, *autobiography*, *bionic*, *antibiotic*, and *biometrics*.

A user-friendly resource for teaching word parts is *Vocabulary Through Morphemes* by Susan Ebbers. Susan will be a presenter at the 2012 Plain Talk about Reading Institute.

What follows on pages 3-7 is a compilation of common prefixes, roots and suffixes. The compilation is by no means exhaustive; it should be used only as a place to start.

References

Carroll, J.B., Davies, P., & Richman, B. (1971). *The American Heritage word frequency book*. Boston: Houghton Mifflin.

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Alice Thomas is president and CEO of the Center for Development and Learning (CDL). She will be a presenter at CDL's 2012 Plain Talk about Reading Institute.

Common Prefixes, Suffixes and Roots

Compiled by Alice Thomas

The 20 Most Common Prefixes in Academic Texts

Prefix	Meaning	Examples
1. un-	not; opposite	uncover, unlock, unsafe
2. re-	again; back	rewrite, reread, return
3. in-, im-, ir-, i	not; into	incorrect, insert, inexpensive, illegal, irregular, inability
4. dis-	away, apart, negative	discover, discontent, distrust
5. en-, em-	cause to	enjoy, endure, enlighten, entail
6. non-	not	nonsense, nonverbal, nonstick, nonspecific
7. in-, im-	in, into	invade, implant
8. over-	too much	overload, overdo, overact, overboard, overdose
9. mis-	wrongly	misjudge, misinterpret, misguided, mismatch, misplace
10. sub-	under	submarine, subtext, substandard, subtotal, subversive
11. pre-	before	preview, pretest, prevent, preplan
12. inter-	between, among	international, intermission, intermingle, interface
13. fore-	before	foreshadow, foresight, foreseeable, forecast, foreground
14. de-	opposite of	defrost, depose, detour, debug, decaffeinated
15. trans-	across; move between	transatlantic, transcend, transfer, transact, transport
16. super-	above	supersonic, superstar, supernatural, superstore
17. semi-	half	semicircle, semiprecious, semicolon, semifinal
18. anti-	against	antifreeze, antithesis, antitrust, antidote, antisocial
19. mid-	middle	midterm, Midwest, midstream, midway, midnight
20. under-	too little; not enough	underfed, underdog, underestimate, underage

Ranked by Carroll et al (1971) and applied to third grade research by White, Sowell and Yanagihara (1989)

Common Number Prefixes

Greek	Latin	Meaning	Examples
mono-	uni-	1	monotone, monopoly, monologue, monogamy, monochrome, monograph, monomial, monotheism, universe, uniform, unicorn
di-	bi-, du-, duo-	2	dichotomy, bilingual, binary, bimonthly, binoculars, duo, duet, duel
tri-	tri-	3	tricycle, triad, triathlon, triangle, tripod, triumvirate, triple
tetra-	quadri-, quart-	4	tetrameter, quadrilateral, quadriplegic, quadrangle, quadruple quarter, quarterly, quartet, quartile
penta-	quin-	5	pentameter, pentagon, quintet, quintuplet, quintuplicate
hexa-	sext-	6	hexagon, hexameter, sextuplet, sextet, sextagenarian
hepta-	septem-, septi-	7	heptagon, heptameter, heptagon, septuagenarian
octo-	octa-, oct-	8	octagon, octogenarian, octopus, octahedron, octant
ennea-	novem-	9	novena
deca-,	deci-, decem-	10	decade, decagon, decahedron, Decalogue, decimal, decibel
hemi-	semi-	half	hemisphere, semicircle, semicolon, semifinal, semiannual, semester, semisweet
poly-	multi-	many	polygon, polygamy, polyester, polymer, polynomial, multiply, multifaceted, multilingual, multitude, multivitamin, multiple
hecto-	cent-, cente-	100	cent, centennial, centurion, centipede, centenary, cent
kilo-, chilia-	milli-, mille-	1000	kilogram, kilometer, kilobyte, milligram, millisecond, millennium

Common Suffixes

Suffix	Meaning	Examples
-s, -es <i>plural</i>	more than one	movies, wishes, hats, amendments
-ed <i>past tense</i>	in the past	walked, jumped, helped
-ing <i>present tense</i>	in the present	walking, jumping, helping, doing, coming
-ate <i>verb</i>	become	eradicate, placate, demonstrate, complicate, hesitate, procrastinate, ruminant
-en <i>verb</i>	become	enlighten, tighten, frighten, brighten, dampen, fasten, heighten, loosen, straighten
-ify, -fy <i>verb</i>	make or become	terrify, verify, clarify, dignify, rectify, magnify, classify
-ize, -ise <i>verb</i>	become	civilize, dramatize, rationalize, criticize, romanticize, categorize, chastise, polarize, politicize, modernize
-ly <i>adverb</i>	how something is	quickly, fearfully, easily, happily, majestically, nonchalantly, slowly, literally, barely, carefully, carelessly, abruptly, kindly
-acy <i>noun</i>	state or quality	privacy, occupancy, democracy, buoyancy, saliency, literacy, secretly, politely, hurriedly, rapidly
-al <i>noun</i>	act or process of	refusal, proposal, dismissal, retrieval, rehearsal
-ance, -ence <i>noun</i>	state or quality of	maintenance, eminence, prominence, dominance, coincidence, decadence, cadence
-dom <i>noun</i>	place or state of being	freedom, kingdom, wisdom, fiefdom, boredom, martyrdom
-er, -or <i>noun</i>	one who; what/that/which	trainer, protector, preacher, teacher, mentor, tailor, conductor, boxer, baker, survivor, orator
-ism <i>noun</i>	doctrine, belief	communism, socialism, pragmatism, realism, romanticism, feudalism, racism, Catholicism, Buddhism, capitalism
-ist <i>noun</i>	one who	chemist, socialist, biologist, publicist, realist, romanticist, pragmatist

-ity, -ty <i>noun</i>	quality of	veracity, honesty, clarity, laxity, sanity, vanity, rigidity, velocity, curiosity, responsibility
-ment <i>noun</i>	condition of	argument, judgment, apartment, contentment, resentment, basement
-ness <i>noun</i>	state of being	heaviness, happiness, openness, harshness, cleanliness, carelessness
-ion, -sion, -tion <i>noun</i>	state of being; quality; act	concession, transition, action, erosion, vision, invitation, conclusion, condemnation
-able, -ible <i>adjective</i>	able to be, can be done	comfortable, likable, enjoyable, solvable, sensible, incredible, edible, presentable
-al, -ial <i>adjective</i>	related to, like, pertaining to	fatal, cordial, structural, territorial, categorical, regional, refusal, proposal, dismissal, retrieval, rehearsal
-ful <i>adjective</i>	notable for	fanciful, beautiful, wonderful, colorful, eventful, fearful, hateful, resentful
-ic, -ical <i>adjective</i>	pertaining to	musical, mythic, mystical, comical, historic, historical, magical
-ious, -ous <i>adjective</i>	characterized by	nutritious, portentous, pretentious, curious, furious, prosperous
-ish <i>adjective</i>	having the quality of	fiendish, childish, selfish, boyish
-ive <i>adjective</i>	having the nature of	creative, festive, responsive, positive, negative, inventive
-less <i>adjective</i>	without	endless, fruitless, worthless, powerless, bottomless, relentless, selfless
-y, -ly <i>adjective</i>	characterized by; act in a way that	sleazy, pudgy, funny, foggy, risky, milky, sudsy, curly, crazy, bouncy, shiny, manly, heavenly

Common Latin and Greek Roots

Root	Meaning	Origin	Examples
aqua	water	Greek	aquarium, aqueduct, aquaculture, aquamarine, aquaplane, aquatic
aud	hearing	Latin	audio, audition, audiovisual, auditorium, inaudible
auto	self	Greek	autograph, autobiography, automobile, autocrat, autonomy
astro	star	Greek	astronomy, astrophysics, astrology, astronaut, astronomer, asterisk
biblio	book	Greek	Bible, bibliography, bibliophobia, bibliophile, biblioklept
bio	life	Greek	biography, biology, autobiography, bionic, biotic, antibiotic, biometrics
chron	time	Greek	synchronize, chronology, chronic, chronicle, anachronism
corp	body	Latin	corpse, corporation, corps, incorporate, corporeal, corpulence
demo	the people	Greek	democracy, demography, epidemic, demotic, endemic, pandemic
dic, dict	speak, tell	Latin	dictate, dictation, diction, dictator, verdict, predict, contradict, benediction, edict
dorm	sleep	Latin	dormant, dormitory, dormer, dormouse
geo	earth	Greek	geology, geologist, geometry, geography, geographer, geopolitical, geothermal
graph	to write, to draw	Greek	autograph, biography, photograph, telegraph, lithograph
hydro	water	Greek	hydroplane, dehydrate, hydroelectric, hydrogen, hydrophone
ject	throw	Latin	reject, deject, project, inject, injection, projection
logos, logy	study	Greek	geology, astrology, biology, numerology, zoology, technology, psychology, anthropology, mythology
luna	moon	Latin	lunar, lunacy, lunatic, interlunar

meter	measure	Greek	meter, thermometer, diameter, geometry, optometry, barometer, centimeter, symmetry, voltammeter
mega	great, large	Greek	megaphone, megalith, megalomania, megatons, megalopolis
min	small, little	Latin	minimal, minimize, minimum, mini, miniature, minuscule, minute, minority
mit, mis	send	Latin	mission, transmit, transmission, remit, missile, submission, permit, emit, emissary
path	feeling, suffering	Greek	pathetic, pathology, apathy, antipathy, sympathy, telepathy, empathy, sociopath
ped	foot	Latin	pedestrian, pedal, peddle, peddler, pedicure, pedometer
philia	love, friendship	Greek	philosopher, Philadelphia, philanthropist, philharmonic, Philip
phono	sound	Greek	phonograph, microphone, symphony, telephone, phonogram, megaphone, phony, euphony, xylophone, phony,
photo	light	Greek	photograph, photosynthesis, telephoto, photometer, photosensitive
port	carry	Latin	port, transport, transportation, portable, portage, report
spect	see	Latin	respect, inspection, inspector, spectator, spectacles, prospect
scope	look at	Greek	microscope, telescope, periscope, kaleidoscope,
sol	sun	Latin	solar, solar system, solstice, solarium, parasol
struct	build, form	Latin	instruct, instruction, construction, reconstruction, destruct, destruction, infrastructure, construe, instrument, instrumental
tele	distant	Greek	telephone, television, telegraph, telephoto, telescope, telepathy, telethon,
terra	land	Latin	terrarium, extraterrestrial, Mediterranean Sea, subterranean, terrain, <i>terra firma</i>