

# Language of Health Science

Key

Learning Health Science requires learning a new language. Scientists often use scientific words for common words that most of us already know. For example, a scientist will say "neo" instead of "new" or "pseudo" instead of "fake". To learn science, you need to also learn this new language. Don't worry, though. This list will help you. Just remember that most words can be broken up into a **PREFIX** (the beginning of the word) and a **SUFFIX** (the end of the word). Look at the example on the next page for help on how to use this list.

**PREFIX LIST** = beginning

- gives you a clue into what to expect in a word's meaning

PREFIX	MEANING	PREFIX	MEANING	PREFIX	MEANING
a-	without, lacking	e-/ef-/ex-	out, out of, from	oculo-	eye
ab-	away from	echin-	spiny	odont-	tooth
adipo-	fat	ect-	outside	olf-	smell
alb-	colorless	en-	in	omni-	all
amphi-/amp-	of both kinds	encephal-	brain	opthal-	eye
andr-	male	epi-	on, above	oss-/ost-	bone
angio-	vessel (blood)	extra-	outside, beyond	phag-	eat
ante-	before	gastro-	stomach	photo-	light
anthropo-	humans	gene-	origin, birth	plasm-	form
anti-	against	geo-	earth	pneumo-	lungs
aqua-	water	glottis-	mouth of windpipe	pre-	before
arbor-	tree	gymno-	uncovered	prot-/proto-	first
arthro-	jointed	hepato-	liver	pseudo-	fake, false
aster-	star	hetero-	different	retro-	backward, back
audi-	hear, sound	hiber-	winter	rota-	turn, wheel
auto-	self	homo-	same, alike	rupt-	break, burst
bi-	two, twice	hydro-	water	sub-	under, beneath
bio-	life, living	hyper-	over, above	super-/sur-	above, upon
bronch-	windpipe (lungs)	hypo-	below, under, less	tele-	at a distance
card-	heart	inter-	between	therm-	temperature
carn-	meat	intra-	within, during, inside	trans-	across, beyond
cell-	storeroom	ichty-	fish	tri-	three
cephalo-	head	immunis-	free	trop-	turning
chlor-	green	leuc-	white	ventr-	belly
chrom-	color	lith-	stone	uni-	one
chron-	time	luna-	moon	zo-	animal
coel-	hollow	macro-	large		
com-/con-/co-	with, together	meta-	change		
contra-	against	micro-	small		
cran-	head	mono-	single		
cyt-	cell	multi-	many		
de-	from, away	morph-	form		
deca-	ten	neo-	new		
derma-	skin	non-	not		
den-	tooth	neur-	nerve		
di-	two, double				
dia-	through, across				
dis-/dif-	apart from, deprive				

## SUFFIX LIST = endings

- usually indicates a procedure, a condition, or a disease

SUFFIX	MEANING
-able/ -ible	able to, capable of
-algia	pain
-ectomy	cut out
-ent, -er, -ist	person, agent
-graph	instrument for making records
-ic	of or pertaining to
-ism	act of, condition
-itis	inflammation (swelling) or disease
-meter	measure
-ology/ -logy	study of, science of
-phyll	leaf
-pod/ -ped	foot, feet
-scope	look, observe
-sect	cut
-sperm	seed

### Example of how to use these lists

Word: DERMATOLOGIST

**Step 1.** Look up the first part of the word under the PREFIX LIST

→ **derma** = skin

**Step 2.** Look for the rest of the word under the SUFFIX LIST

→ **ology** = study/science of

→ **ist** = person

So, the whole word means "skin - science of - person" or person whose science is skin.

### Note

- The order of the words may not always seem right; don't worry about that.
- Sometimes you can only find one part of a word but that can be a good clue about the meaning
- You may have extra letters like **o** or **a** or **i** between two parts of a word – they don't mean anything
- If you don't see a word in the suffix list, check the prefix list. Sometimes, words can contain more than 1 prefix and suffix.

Using the Language of Science prefix and suffix lists, figure out the meanings of the follow  
Notice that several prefixes can mean the same thing:

1. What are two prefixes that mean ONE or SINGLE? uni mono
2. What are two suffixes that mean CUT or CUT OUT? sect ectomy
3. What are two prefixes that mean ABOVE or ON? super epi hyper
4. What are two prefixes that mean TWO? bi di

Just knowing one part of a word gives you a clue to the whole word:

5. Would you want to be careful when touching an animal called an ECHINDNA?  Yes  No  
    ↓  
    spiny
6. What does a CARNIVORE eat? meat
7. Is a NEONATE a tiny baby or an old person? baby (new)
8. Is a CRANIOTOMY a serious surgery?  Yes  No → head
9. An ALBINO rabbit is what color? white
10. Does an AMPHIBIAN live on land or water? both
11. If a medicine is CONTRAINDICATED for you, should you take it? Yes   No → against
12. A DERMATOLOGIST works with what part of the body? skin
13. How does a tiny animal called a ROTIFER travel through the water? rolling  
(hint: look up rota)
14. If you visited the Elysian Park ARBORETUM, what would you expect to see? trees
15. In 1969, where did the LUNAR mission land? moon
16. What is another name for a CHRONOMETER? clock → time
17. Why do they call this symbol (\*) an ASTERISK? star

Using the Language of Science prefix and suffix lists, figure out the meanings of the following words:

Example: cardiology - heart study or science (study of the heart)

18. arthropod - jointed foot
19. echinoderm - spiny skin
20. epiglottis - above mouth of windpipe
21. multicellular - many storerooms
22. hypodermic - below the skin

- 23. anthropology – study of humans
- 24. hypothermic – below temperature
- 25. gymnosperm – uncovered seed
- 26. pseudopod – false foot
- 27. photograph – light making instrument
- 28. autograph – self record
- 29. neuralgia – nerve pain
- 30. decapod – ten foot
- 31. hepatitis – liver disease
- 32. cytology – study of the cell
- 33. zoology – study of animals
- 34. microbiology – study of small living things
- 35. geology – study of the earth
- 36. biology – study of life
- 37. phototropism – act of turning towards life

Use your prefix-suffix list to make up a scientific word with the following meaning: **Aw.V.**

- 38. The study of cells ex! cytology
- 39. Heat from within yourself hyperintra-thermic
- 40. Lining of the stomach gastrodermic
- 41. White blood cell leucocyte
- 42. an organism changing in appearance or form metamorph

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