

# Language of Science

Learning the language of science is a lot like 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 = beginnings

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-	white	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		
ante-	before	gastro-	stomach	phag-	eat
anthropo-	humans	gene-	origin, birth	photo-	light
anti-	against	geo-	earth	plasm-	form
aqua-	water	glottis-	mouth of windpipe	pneumo-	lungs
arbor-	tree	gymno-	uncovered	pre-	before
arthro-	jointed			prot-/proto-	first
aster-	star	hepato-	liver	pseudo-	fake, false
audi-	hear, sound	hetero-	different		
auto-	self	hiber-	winter	retro-	backward, back
		homo-	same, alike	rota-	turn, wheel
bi-	two, twice	hydro-	water	rupt-	break, burst
bio-	life, living	hyper-	over, above		
bronch-	windpipe (lungs)	hypo-	below, under, less	sub-	under, beneath
				super-/sur-	above, upon
card-	heart	inter-	between	tele-	at a distance
carn-	meat	intra-	within, during, inside	therm-	temperature
cell-	storeroom	ichty-	fish	trans-	across, beyond
cephalo-	head	immunis-	free	tri-	three
chlor-	green			trop-	turning
chrom-	color	leuc-	white		
chron-	time	lith-	stone	ventr-	belly
coel-	hollow	luna-	moon		
com-/con-/co-	with, together			uni-	one
contra-	against	macro-	large	zo-	animal
cran-	head	meta-	change		
cyt-	cell	micro-	small		
		mono-	single		
de-	from, away	multi-	many		
deca-	ten	morph-	form		
derm-	skin				
den-	tooth	neo-	new		
di-	two, double	non-	not		
dia-	through, across	neur-	nerve		
dis-/dif-	apart from, deprive				

## SUFFIX LIST = endings

SUFFIX	MEANING
-able/ -ible	able to, capable of
-algia	pain
-ectomy	cut out
-graph	instrument for making records
-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 this list

Word: **TELESCOPE**

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

→ **tele** = at a distance

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

→ **scope** = look or observe

So, the whole word means “distance-look” or to look at something at a distance.

### 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 be both a prefix and a suffix.