

Prefixes

A prefix is a short word part added before a word or word root to modify its meaning. For example, the word **lateral** means “side.” Adding the prefix **uni-**, meaning “one,” forms **unilateral**, which means “affecting or involving one side.” Adding the prefix **contra-**, meaning “against or opposite,” forms **contralateral**, which refers to opposite side.

TABLE 3-1 Prefixes for Numbers*

PREFIX	MEANING	EXAMPLE	DEFINITION OF EXAMPLE
prim/i-	first	primitive <i>PRIM-i-tiv</i>	occurring first in time
mon/o	one	monocular <i>mon-OK-ū-lar</i>	pertaining to one eye
uni-	one	unicellular <i>ū-ni-SEL-ū-lar</i>	composed of one cell (Fig. 3-1)
hemi-	half; one side	hemisphere <i>HEM-i-sfēr</i>	one half of a rounded structure
semi-	half; partial	semisolid <i>sem-ē-SOL-id</i>	partially solid
bi-	two, twice	bicuspid <i>bī-KUS-pid</i>	a tooth with two points (cusps)
di-	two, twice	dimorphous <i>dī-MOR-fus</i>	having two forms (morph/o)
diplo/o	double	diploid <i>DIP-loyd</i>	having two sets of chromosomes
tri-	three	triplet <i>TRIP-let</i>	one of three offspring produced in a single birth
quadr/i-	four	quadrant <i>KWOD-rant</i>	one-fourth of an area
tetra-	four	tetrahedron <i>tet-ra-HĒ-dron</i>	a figure with four surfaces
multi-	many	multiple <i>MUL-ti-pl</i>	consisting of many parts
poly-	many, much	polysaccharide <i>pol-ē-SAK-a-riđ</i>	substance composed of many sugars

Exercise

Fill in the blanks:

1. Monoclonal refers to a colony (clone) derived from_____ cell(s).
2. The quadriceps muscle has _____ part(s).
3. To unify means to make two or more parts into _____ part(s).
4. The term semilunar means _____ moon(s).
5. A dichotomy has _____ part(s).
6. A multicellular organism has _____ cell(s).
7. A tetralogy (te-TRAL-o-je) is composed of_____ elements or factors.
8. A triangle (TRI-an-gl) has _____ angle(s).
9. Bipolar (bi-PO-lar) means having _____pole(s).

Prefixes for Colors

Prefix	Meaning	Example	Prefix meaning example
cyan/o	blue	cyanosis	bluish discoloration of the skin due to lack of oxygen
erythr/o	red	erythrocyte	a red blood cell
leuk/o	white, colorless	leukoplakia	white patches in the mouth
melan/o	black, dark	melanin	the dark pigment that colors the hair and skin
xanth/o	yellow	xanthoderma	yellow coloration of the skin

Match the following terms and write the appropriate letter to the left of each number

- | | |
|---|---------------------------------------|
| 1. melanocyte (<i>MEL-a-no-sit</i>) | a. pertaining to bluish discoloration |
| 2. xanthoma (<i>zan-THO_-ma</i>) | b. redness of the skin |
| 3. cyanotic (<i>si_-a-NOT-ik</i>) | c. yellow raised area on the skin |
| 4. erythroderma (<i>e-rith-ro-DER-ma</i>) | d. cell that produces dark pigment |
| 5. leukemia (<i>lu_-KE-me-a</i>) | e. overgrowth of white blood cells |

Negative Prefixes:

TABLE 3-3 Negative Prefixes			
PREFIX	MEANING	EXAMPLE	DEFINITION OF EXAMPLE
a-, an-	not; without	aseptic <i>ā-SEP-tik</i>	free of infectious organisms
anti-	against	antidote <i>AN-ti-dōt</i>	means for counteracting a poison
contra-	against, opposite	contraception <i>kon-tra-SEP-shun</i>	prevention of conception
de-	down, without	depilatory <i>dē-PIL-a-tor-ē</i>	agent used to remove hair (pil/o)
dis-	absence, removal, separation	dissect <i>di-SEKT</i>	to separate tissues for anatomical study
in-*; im- (used before b, m, p)	not	insignificant <i>in-sig-NIF-i-cant</i>	not important
non-	not	noninfectious <i>non-in-FEK-shus</i>	not able to spread disease
un-	not	unconscious <i>un-KON-shus</i>	not responsive

*May also mean "in" or "into" as in inject, inhale.

Exercise

Identify and define the prefix in each of the following words:

	Prefix	Meaning of Prefix
1. amorphous (without form) (root morph/o)	a-	not, without, lack of, absence
2. antibody	----	-----
3. amnesia	----	-----
4. disintegrate	----	-----
5. contralateral	----	-----
6. incontinent	----	-----
7. dehumidify	----	-----
8. noncontributory	----	-----

Prefixes for Direction:-

TABLE 3-4 Prefixes for Direction			
PREFIX	MEANING	EXAMPLE	DEFINITION OF EXAMPLE
ab-	away from	abduct <i>ab-DUKT</i>	to move away from the midline
ad-	toward; near	adhere <i>ad-HĒR</i>	to attach or stick together
dia-	through	dialysis <i>dī-AL-i-sis</i>	separation (-lysis) by passage through a membrane (Fig. 3-2)
per-	through	percutaneous <i>per-kū-TĀ-nē-us</i>	through the skin
trans-	through	transfusion <i>trans-FŪ-zhun</i>	introduction of blood or blood components into the bloodstream

Prefixes for Degree :

PREFIX	MEANING	EXAMPLE	DEFINITION OF EXAMPLE
hyper-	over, excess, abnormally high, increased	hyperventilation <i>hī-per-ven-ti-LĀ-shun</i>	excess breathing
hypo-*	under; below	hypoxia <i>hī-POK-sē-a</i>	decreased oxygen in the tissues
olig/o-	few, scanty	oligomenorrhea <i>ol-i-gō-men-ō-RE-a</i>	a scanty menstrual flow (men/o)
pan-	all	panacea <i>pan-a-SĒ-a</i>	remedy that cures all ills; a cure-all
super-*	above, excess	supernumerary <i>su-per-NŪ-mer-ar-ē</i>	in excess number

*May also show position, as in hypodermic, superficial.

Exercise:

Match the following terms and write the appropriate letter to the left of each number:

- | | |
|------------------|--|
| 1. pandemic | a. located at the surface (above other structures) |
| 2. hyposecretion | b. less than the normal number of teeth |
| 3. hypertension | c. underproduction of a substance |
| 4. oligodontia | d. disease affecting an entire population |
| 5. superficial | e. high blood pressure |

Prefixes for Size and Comparison:-

PREFIX	MEANING	EXAMPLE	DEFINITION OF EXAMPLE
equi-	equal, same	equilateral <i>e-kwi-LAT-er-al</i>	having equal sides
eu-	true, good, easy, normal	euthanasia <i>ū-tha-NĀ-zē-a</i>	easy or painless death (root thanat/o)
hetero-	other, different, unequal	heterosexual <i>het-er-ō-SEX-ū-al</i>	pertaining to the opposite sex
homo-, homeo-	same, unchanging	homothermic <i>hō-mō-THER-mik</i>	maintaining a constant body temperature (root therm/o); warm blooded
iso-	equal, same	isograft <i>ī-sō-graft</i>	graft between two genetically identical individuals
macro-	large, abnormally large	macrocyte <i>MAK-rō-sīt</i>	extremely large red blood cell
mega-,* megalo-	large; abnormally large	megabladder <i>meg-a-BLAD-er</i>	enlargement of the bladder
micro-†	small	microscopic <i>mī-krō-SKOP-ik</i>	extremely small; visible only through a microscope
neo-	new	neonate <i>NĒ-ō-nāt</i>	a newborn infant (Fig. 3-3)
normo-	normal	normovolemia <i>nor-mō-vol-Ē-mē-a</i>	normal blood volume
ortho-	straight, correct, upright	orthotic <i>or-THOT-ik</i>	correcting or preventing deformities
poikilo-	varied; irregular	poikiloderma <i>poy-ki-lō-DER-ma</i>	mottled condition of the skin
pseudo-	false	pseudoplegia <i>sū-dō-PLĒ-jē-a</i>	false paralysis (suffix -plegia)
re-	again; back	regurgitation <i>rē-gur-ji-TĀ-shun</i>	backward or return flow, as of blood or stomach contents

*Mega- also means "one million" as in megahertz.
†Micro- also means "one millionth" as in microsecond.

Exercise:

Match the following terms and write the appropriate letter to the left of each number:

- | | |
|-------------------|--|
| 1. reflux | a. an irregularly shaped cell |
| 2. orthodontic | b. pertaining to normal body temperature |
| 3. pseudoreaction | c. backward flow |
| 4. poikilocyte | d. false response |
| 5. normothermic | e. pertaining to straight teeth |

Prefixes for Time and/or Position:

PREFIX	MEANING	EXAMPLE	DEFINITION OF EXAMPLE
ante-	before	antenatal <i>an-tē-NĀ-tal</i>	before birth
pre-	before, in front of	predisposing <i>prē-dis-PŌZ-ing</i>	leading toward a condition, such as disease
pro-	before, in front of	prodrome <i>prō-drōm</i>	symptom that precedes a disease
post-	after, behind	postmenopausal <i>pōst-men-ō-PAW-sal</i>	after menopause

Exercise:

Match the following terms and write the appropriate letter to the left of each number:

- | | |
|---------------|-------------------------------------|
| 1. postnasal | a. throwing or extending forward |
| 2. antecedent | b. occurring before the proper time |
| 3. projection | c. behind the nose |
| 4. premature | d. before birth |
| 5. prenatal | e. occurring before another event |

Prefixes for Position:

PREFIX	MEANING	EXAMPLE	DEFINITION OF EXAMPLE
dextr/o-	right	dextrocardia <i>deks-trō-KAR-dē-a</i>	location of the heart (cardi/o) in the right side of the chest
sinistr/o-	left	sinistrad <i>sin-IS-trad</i>	toward the left
ec-, ecto-	out; outside	ectoderm <i>EK-tō-derm</i>	outermost layer of the developing embryo
ex/o-	away from; outside	excise <i>ek-SĪZ</i>	to cut out
end/o-	in; within	endoscope <i>EN-dō-skōp</i>	device for viewing the inside of a cavity or organ
mes/o-	middle	mesencephalon <i>mes-en-SEF-a-lon</i>	midbrain
syn-, sym- (used before b, m, p,)	together	synapse <i>SIN-aps</i>	a junction between two nerve cells (Fig. 3-4)
tel/e-, tel/o-	end	telangion <i>tel-AN-jē-on</i>	a terminal vessel (root angi/o)

Exercise:

Match the following terms and write the appropriate letter to the left of each number:

- | | |
|---|---|
| 1. endonasal (<i>en-d o-NA -zal</i>) | a. placement of the heart outside its normal position |
| 2. syndrome (<i>SIN-dro m</i>) | b. middle layer of the developing embryo |
| 3. mesoderm (<i>MES-o-derm</i>) | c. the last stage of cell division |
| 4. ectocardia (<i>ek-to-KAR-de-a</i>) | d. within the nose |
| 5. Telophase (<i>TEL-e-f a z</i>) | e. group of symptoms occurring together |

Identify and define the prefix in each of the following words:

	Prefix	Meaning of Prefix
6. synthesis	_____	_____
7. extract	_____	_____
8. ectopic (<i>ek-TOP-ik</i>)	_____	_____
9. symbiosis (<i>sim-bi-O-sis</i>)	_____	_____
10. endoplasm (<i>en-do -PLAZM</i>)	_____	_____