

Root words: Prefixes, Suffixes, and Combining Forms

Prefixes and Combining Forms

Prefix	Translation	Example	Definition
a-, an-	absence, lack	acardia	lack of a heart;
an-	absence, lack	anaerobic	in the absence of oxygen
ab-	departing from; away from	abnormal	departing from normal
acou-	hearing	acoustics	the science of sound
acr-, acro-	extreme, extremity; peak	acrodermatitis	inflammation of the skin of the extremities
ad-	to, toward	adorbital	toward the orbit
aden-, adeno-	gland	adeniform	resembling a gland in shape
aero-	air	aerobic respiration	oxygen-requiring metabolism
af-	toward	afferent neurons	neurons that carry impulses to the central nervous system
alb-	white	corpus albicans of the ovary	a whit scar tissue
amphi-	on both sides; of both kinds	amphibian	an organism capable of living both in water and on land
ana-	apart, up, again	anaphase of mitosis	when the chromosomes separate
angi-	vessel	angitis	inflammation of a lymphatic vessel or blood vessel
ant-, anti-	opposed to; preventing, inhibiting	anticoagulant	a substance that prevents blood coagulant
ante-	preceding; before	antecubital	in front of the elbow
ap-, api-	tip, extremity	apex of the heart	
append-	hang to	appendicular skeleton	
aqua-, aque-	water	aqueous solutions	
areola-	open space	areolar connective tissue	
arthr-arthro	joint	arthropathy	any joint disease
artic-	joint	articular surfaces of bones	the points of connection
atri-	vestibule	atria	upper chambers of the heart
aut-, auto-	self	autonomous	self-generated
ax-, axi-, axo-	axis, axle	axial skeleton	axis of vertebral column
azyg-	unpaired	azygous vein	an unpaired vessel
basal	base	basal lamina of epithelial basement membrane	
bi-	two	bicuspid	having two cusps
bio-	life	biology	the study of life and living organisms
blast-	bud, germ	blastocyst	undifferentiated embryonic cell
brachi-	arm	brachial plexus of peripheral nervous system	supplies the arm
brev-	short	peroneus brevis	a short leg muscle
broncho-	bronchus	bronchospasm	spasmodic contraction of bronchial muscle
bucco-	cheek	buccolabial	pertaining to the cheek and lip
caput-	head	decapitate	remove the head
carcin-	cancer	carcinogen	a cancer-causing agent
cardi-, cardio-	heart	cardiotoxic	harmful to the heart
carneo-	flesh	trebeculae carneae	ridges of muscle in the ventricles of the heart
caud-	tail	caudal	directional term
cele-	abdominal	celiac artery	
cephal-	head	cephalometer	an instrument for measuring the head
cerebro-	brain, especially the cerebrum	cerebrospinal	pertaining to the brain and spinal cord
cervix	neck	cervical vertebrae	vertebrae located in the neck
chondr-	cartilage	chondrogenic	giving rise to cartilage
cili-	small hair	ciliated epithelium	
circum-	around	circumnuclear	surrounding the nucleus
clavic-	key	clavicle	a "skeleton key"
co-, con-	together	concentric	common center, together in the center
coel-	hollow	coelom	the ventral body cavity
commis-	united	gray commissure of the spinal cord	connects the two columns of gray matter
contra-	against	contraceptive	agent preventing conception
corn-, cornu-	horn	stratum corneum	outer layer of the skin composed of horny cells
corona-	crown	coronal structure of the skull	
corp-	body	corpse, corpus luteum	
cort-	bark	cortex	hormone-secreting body in the ovary
cost-	rib	intercostal	the outer layer of the brain, kidney, adrenal gland, and lymph nodes
crani-	skull	craniotomy	between the ribs
crypt-	hidden	cryptomenorrhea	a skull operation
cubit-	the elbow	cubital fossa	a condition in which menstrual symptoms are experienced but no external loss of blood occurs
cuspid-	pointed	bicuspid and tricuspid	depression on the anterior side of the elbow
cyst-	sac, bladder	cystitis	valves of the heart
cyt-	cell	cytology	inflammation of the urinary bladder
de-	undoing, reversal, loss, removal	deactivation	the study of cells
decid-	falling off	deciduous (milk) teeth	becoming inactive
delta	triangular	deltoid muscle	
den-, dent-	tooth	dens process of axis	roughly triangular in shape
dendr-	tree, branch	dendrites	tooth-shaped process
derm-	skin	dermis	branches of a neuron
di-	twice, double	dimorphism	deep layer of the skin
dia-	through, between	diaphragm	having two forms
dors-	the back	dorsal, dorsum, dorsiflexion	the wall through or between two areas
duc-, duct	lead, draw	ductus deferens	structure that carries sperm from the epididymis into the urethra during ejaculation
dura-	hard	dura mater	tough outer meninx
dys-	difficult, faulty, painful	dyspepsia	disturbed digestion
ec-, ex-, ecto-	out, outside, away from	excrete	to remove materials from the body
ef-	away	efferent nerve fibers	fibers which carry impulses away from the central nervous system
en-, em-	in, inside	encysted	enclosed in a cyst or capsule
endo-	within, inner	endoderm	innermost of the three embryonic layers
entero-	intestine	enterologist	one who specializes in the study of intestinal disorders
epi-	over, above	epidermis	outer layer of the skin
erythr-	red	erythrocyte	red blood cell
eu-	well	eusthesia	a normal state of the senses
exo-	outside, outer layer	exophthalmos	an abnormal protrusion of the eye from the orbit
extra-	outside, beyond	extracellular	outside of the body cells of an organism
extrins-	from the outside	extrinsic muscles of the tongue	
fasci-, fascia-	bundle, band	superficial and deep fascia	
fenestra-	window	fenestrated capillaries	
fontan-	fountain	fontanelles of the skull	
foram-	opening	foramen magnum of the skull	
foss-	ditch	mandibular fossa of the skull	
gangli-	swelling or knot	dorsal root ganglia of the spinal nerves	
gastr-	stomach	gastrin	a hormone that influences gastric acid secretion
germin-	grow	germinal epithelium of the gonads	
glosso-	tongue	glossopathy	any disease of the tongue
glute-	buttock	gluteous maximus	largest muscle of the buttock
gon-, gono-	seed, offspring	gonads	the sex organs
hema-, hemato-, hemo-	blood	hematocyst	a cyst containing blood
hemi-	half	hemiglossal	pertaining to one half of the tongue

hepat-	liver	hepatitis	inflammation of the liver
hetero-	different, other	heterosexuality	sexual desire for a person of the opposite sex
hist-	tissue	histology	the study of tissues
holo-	whole	holocrine glands	whose secretions are whole cells
hom-, homo-	same	homoepiasia	formation of tissue similar to normal tissue
		homocentric	having the same center
hyal-	clear	hyaline cartilage	which has no visible fibers
hydr-, hydro-	water	dehydration	loss of body water
hyper-	excess	hypertension	excessive tension
hypno-	sleep	hypnosis	a sleeplike state
hypo-	below, deficient	hypodermic	beneath the skin
		hypokalemia	deficiency of potassium
hyster-, hystero-	uterus, womb	hysterectomy	removal of the uterus
		hysterodynia	pain in the womb
ile-	intestine	ileum	the last portion of the small intestine
im-	not	impermeable	not permitting passage, not permeable
infra-	below, beneath	infraspinatus	the muscles located below the scapular spine
inter-	between	intercellular	between the cells
intra-	within, inside	intracellular	inside the cell
ipsi-	same	ipsilateral	on the same side
iso-	equal, same	isothermal	equal, or same, temperature
jugul-	throat	jugular veins	prominent vessels in the neck
kera-	horn	keratin	the water-repellent protein of the skin
labi-, labri-	lip	labial frenulum	the membrane which joins the lip to the gum
lact-	milk	lactiferous glands	milk-producing glands of the breast
lacun-	space, cavity, lake	lacunae	the spaces occupied by cells of cartilage and bone tissue
lamell-	small plate	concentric lamellae	rings of bone matrix in compact bone
lamina-	layer, sheet	basal lamina of epithelial basement membrane	part of the epithelial basement membrane
lat-	wide	latissimus dorsi	a broad muscle of the back
later-	side	lateral	directional term
leuko-	white	leukocyte	white blood cell
lip-, lipo-	fat, lipid	lipophage	a cell that has taken up fat in its cytoplasm
luci-	clear	stratum lucidum	clear layer of the epidermis
lumen	light	lumen	center of a hollow structure
lut-	yellow	corpus luteum	a yellow, hormone-secreting structure in the ovary
lymph	water	lymphatic circulation	return of clear fluid to the bloodstream
macro-	large	macromolecule	large molecule
magn-	large	foramen magnum	largest opening of the skull
mal-	bad, abnormal	malfunction	abnormal functioning of an organ
mamm-	breast	mammary gland	breast
mast-	breast	mastectomy	removal of a mammary gland
medi-	middle	medial	directional term
medull-	marrow	medulla	the middle portion of the kidney, adrenal gland, and lymph node
mega-	large	megakaryocyte	large precursor cell of platelets
meningo-	membrane	meningitis	inflammation of the membranes of the brain
meso-	middle	mesoderm	middle germ layer
meta-	beyond, between, transition	matatarsus	the part of the foot between the tarsus and the phalanges
metro-	uterus	metroscope	instrument for examining the uterus
micro-	small	microscope	an instrument used to make small objects appear larger
mito-	thread, filament	mitochondria	small, filament-like structures located in cells
mono-	single	monospasm	spasm of a single limb
morpho-	form	morphology	the study of form and structure of organisms
multi-	many	multinuclear	having several nuclei
myelo-	spinal cord, marrow	myeloblasts	cells of the bone marrow
myo-	muscle	myocardium	heart muscle
narco-	numbness	narcoctic	a drug producing stupor or numbed sensations
necro-	death	necrosis	tissue death
neo-	new	neoplasm	an abnormal growth
nephro-	kidney	nephritis	inflammation of the kidney
neuro-	nerve	neurophysiology	the physiology of the nervous system
noto-	back	notochord	the embryonic structure that precedes the vertebral column
ob-	before, against	obstruction	impeding or blocking up
oculo-	eye	monocular	pertaining to one eye
odonto-	teeth	orthodontist	one who specializes in proper positioning of the teeth in relation to each other
olfact-	smell	olfactory nerves	
oligo-	few	oligodendrocytes	neuroglial cells with few branches
oo-	egg	oocyte	precursor of female gamete
ophthalmo-	eye	ophthalmology	the study of the eyes and related disease
orb-	circular	orbicularis oculi	muscle that encircles the eye
ortho-	straight, direct	orthopedic	correction of deformities of the musculoskeletal system
osteo-	bone	osteoderma	bony formations in the skin
oto-	ear	otoscope	a device for examining the ear
ov-, ovi-	egg	ovum, oviduct	
oxy-	oxygen	oxygenation	the saturation of a substance with oxygen
pan-	all, universal	panacea	a cure-all
papill-	nipple	papillary muscles	muscles extending from the wall of the ventricles that anchor the atrioventricular valves
para-	beside, near	paraphrenitis	inflammation of the tissues adjacent to the diaphragm
pariet-	a wall	parietal pleura	the layer of pleura against the thoracic wall
pect-, pectus	breast	pectoralis major	a large chest muscle
pelv-	a basin	pelvic girdle	which cradles the pelvic organ
peni-	a tail	penis	male copulatory organ
pep-, peps-, pept-	digest	pepsin	a digestive enzyme of the stomach; peptid ulcer
peri-	around	perianal	situated around the anus
phago-	eat	phagocyte	a cell that engulfs and digests particles or cells
phleb-	vein	phlebitis	inflammation of the veins
pia	tender	pia mater	delicate inner membrane around the brain and spinal cord
pin-, pino-	drink	pinocytosis	the engulfing of small particles by a cell
pleur-	side, rib	pleural serosa	the membrane that lines the thoracic cavity and covers the lung
plex-, plexus	net	brachial plexus	the network of nerves that supplies the arm
pneumo-	air, wind	pneumothorax	air in the pleural cavity
pod-	foot	podiatry	the treatment of foot disorders
poly-	multiple	polymorphism	multiple forms
post-	after, behind	posterior	places behind (a specific) part
pre-, pro-	before, ahead of	prenatal	before birth
procto-	rectum, anus	proctoscope	an instrument for examining the rectum
pseudo-	false	pseudotumor	a false tumor
pulmo-	lung	pulmonary artery	which brings blood to the lungs
pyo-	pus	pyocyst	a cyst that contains pus
quad-, quadr-	four	quadriceps	four muscles located in the anterior thigh
re-	back, again	reinfect	
rect-	straight	rectus abdominis	longitudinal muscle of the anterior abdominal wall

ren-	kidney	renal artery	arterial vessel to the kidney
retro-	backward, behind	retrogression	to move backward in development
rug-	fold, wrinkle	rugae	the folds in the stomach, gallbladder, and urinary bladder
sagitt-	arrow	sagittal	directional term
sarco-	flesh	sarcomere	unit of contraction in skeletal muscle
sclero-	hard	sclerodermitis	inflammatory thickening and hardening of the skin
semi-	half	semicircular	having the form of half a circle
septum-	a fence	interventricular septum in the heart	
serrat-	saw	serratus anterior	
sin-, sino-	a hollow	sinuses of the skull	
soma-	body	somatic nervous system	
splanchn-	organ	splanchnic nerve	autonomic supply to abdominal viscera
squam-	scal, flat	squamous epithelium; squamous suture of the skull	
steno-	narrow	stenocoriosis	
stroma	spread out	stroma	narrowing of the pupil
sub-	beneath, under	sublingual	the connective tissue of some organs
super-	above, upon	superior	beneath the tongue
supra-	above, upon	supracondylar	quality or state of being above others or a part
sym-, syn-	together, with	synapse	above a condyle
synerg-	work together	synergists	the region of communication between two neurons
tachy-	rapid	tachycardia	muscles that work together to produce a specific movement
telo-	the end	telophase	abnormally rapid heartbeat
templ-, tempo-	time	temporal region of the skull	the end of mitosis
teres	round, smooth	ligamentum teres	one of the first locations for hair to become gray, thus showing the passage of time or age
therm-	heat	thermometer	also called the round ligament
tissue	woven	tissue	an instrument used to measure heat
tox-	poison	antitoxic	effective against poison
trab-	beam, timber	trabeculae	spicules of bone in spongy bone tissue
trans-	across, through	transpleural	through the pleura
tri-	three	trifurcation	division into three branches
troph-	nourish	trophoblast	from which develops the fetal portion of the placenta
tuber-	swelling	tuberosity	a bump on a bone
vas-	a vessel, duct	vascular system	system of blood vessels
venter, ventr-	abdomen, belly	ventral	directional term
villus	shaggy hair	microvilli	which have the appearance of hair in light microscopy
viscero-	organ, viscera	visceroinhibitory	inhibiting the movements of the viscera
Suffixes			
-able	able to, capable of	viable	ability to live or exist
-ac	referring to	cardiac	referring to the heart
-algia	pain in a certain part	neuralgia	pain along the course of a nerve
-ary	associated with, relating to	coronary	associated with the heart
-ceps	the head	biceps	a muscle with two heads
-cide	destroy, kill	germicide	an agent that kills germs
-cipit	head	occipital	
-clast	break	osteoclast	a cell that dissolves bone matrix
-crine	separate	endocrine organs	which secrete hormones into the blood
-ectomy	cutting out, surgical removal	appendectomy	cutting out of the appendix
-ell, -elle	small	organelle	
-emia	condition of the blood	anemia	deficiency of red blood cells
-esthesi	sensation	anesthesia	lack of sensation
-ferent	carry	efferent nerves	nerves carrying impulses away from the CNS
-form, -forma	shape	cribiform plate of the ethmoid bone	
-fuge	driving out	vermifuge	a substance that expels worms of the intestine
-gen	an agent that initiates	pathogen	any agent that produces disease
-glea, -glia	glue	neuroglia	the connective tissue of the nervous system
-gram	a record, a recording of data	electrocardiogram	a recording showing action of the heart
-graph	an instrument recording data or writing	electrocardiograph	an instrument used to make an electrocardiogram
-ia	condition	insomnia	condition of not being able to sleep
-iatrics	medical specialty	geriatrics	the branch of medicine dealing with diseases associated with old age
-itis	inflammation	gastritis	inflammation of the stomach
-lemma	sheath, husk	sarcolemma	the plasma membrane of a cell
-logy	the study of	pathology	the study of changes in structure and function brought on by disease
-lysis	loosening or breaking down	hydrolysis	chemical decomposition of a compound into other compounds as a result of taking up water
-malacia	soft	osteomalacia	a process leading to bone softening
-mania	obsession, compulsion	erotomania	exaggeration of the sexual passions
-odyn	pain	coccygodynia	pain in the region of the coccyx
-oid	like, resembling	cuboid	shaped as a cube
-oma	tumor	lymphoma	a tumor of the lymphatic tissues
-opia	defect of the eye	myopia	nearsightedness
-ory	referring to, of	auditory	referring to hearing
-pathy	disease	osteopathy	any disease of the bone
-phil, -philo	like, love	hydrophilic	water-attacking molecules
-phobia	fear	acrophobia	fear of heights
-plasm	form, shape	cytoplasm	
-plasty	reconstruction of a part, plastic surgery	rhinoplasty	reconstruction of the nose through surgery
-plegia	paralysis	paraplegia	paralysis of the lower half of the body or limbs
-rrhagia	abnormal or excessive discharge	metrorrhagia	uterine hemorrhage
-rrhea	flow, discharge	diarrhea	abnormal emptying of the bowels
-scope	instrument used for examination	stethoscope	instrument used to listen to sounds of various parts of the body
-stalsis	compression	peristalsis	muscular contractions that propel food along the digestive tract
-stasis	arrest, fixation	hemostasis	arrest of bleeding
-stomy	establishment of an artificial opening	enterostomy	the formation of an artificial opening into the intestine through the abdominal wall
-tomy	to cut	appendectomy	surgical removal of the appendix
-ty	condition of, state	immunity	condition of being resistant to infection or disease
-uria	urine	polyuria	passage of an excessive amount of urine