

Class 1 materials combined

Combining Form	Meaning	Example (Definition)
aden/o	gland	adenopathy (gland disease)
carcin/o	cancer	carcinoma (cancerous tumor)
cardi/o	heart	cardiac (pertaining to the heart)
chem/o	chemical	chemotherapy (treatment with chemicals)
cis/o	to cut	incision (process of cutting into)
dermat/o	skin	dermatology (study of the skin)
enter/o	small intestine	enteric (pertaining to the small intestine)
gastr/o	stomach	gastric (pertaining to the stomach)
gynec/o	female	gynecology (study of females)
hemat/o	blood	hematic (pertaining to the blood)
hydr/o	water	hydrocele (protrusion of water [in the scrotum])
immun/o	immune	immunology (study of immunity)
laryng/o	voice box	laryngeal (pertaining to the voice box)
morph/o	shape	morphology (study of shape)
nephro/o	kidney	nephromegaly (enlarged kidney)
neur/o	nerve	neural (pertaining to a nerve)
ophthalm/o	eye	ophthalmic (pertaining to the eye)
ot/o	ear	otic (pertaining to the ear)
path/o	disease	pathology (study of disease)
pulmon/o	lung	pulmonary (pertaining to the lungs)
rhin/o	nose	rhinoplasty (surgical repair of the nose)
ur/o	urine, urinary tract	urology (study of the urinary tract)
arthr/o	joint	

Common Prefixes

Some of the more common prefixes, their meanings, and examples of their use follow.
When written by themselves, prefixes are followed by a hyphen.

Prefix	Meaning	Example (Definition)
a-	without, away from	aphasia (<i>without speech</i>)
an-	without	anoxia (<i>without oxygen</i>)
ante-	before, in front of	antepartum (<i>before birth</i>)
anti-	against	antibiotic (<i>against life</i>)
auto-	self	autograft (<i>a graft from one's own body</i>)

Prefix	Meaning	Example (Definition)
brady-	slow	bradycardia (slow heartbeat)
dys-	painful, difficult	dyspnea (difficulty breathing)
endo-	within, inner	endoscope (instrument to view within)
epi-	upon, over	epigastric (upon or over the stomach)
eu-	normal, good	eupnea (normal breathing)
hetero-	different	heterograft (a graft from another person's body)
homo-	same	homozygous (having two identical genes)
hyper-	over, above	hypertrophy (overdevelopment)
hypo-	under, below	hypoglossal (under the tongue)
infra-	under, beneath, below	infraorbital (below, under the eye socket)
inter-	among, between	intervertebral (between the vertebrae)
intra-	within, inside	intravenous (inside, within a vein)
macro-	large	macrocephalic (having a large head)
micro-	small	microcephalic (having a small head)
neo-	new	neonate (newborn)
pan-	all	pancarditis (inflammation of all the heart)
para-	beside, beyond, near	paranasal (near or alongside the nose)
per-	through	percutaneous (through the skin)
peri-	around	pericardial (around the heart)
post-	after	postpartum (after birth)
pre-	before, in front of	prefrontal (in front of the frontal bone)
pseudo-	false	pseudocyesis (false pregnancy)

Prefix	Meaning	Example (Definition)
retro-	backward, behind	retrograde (movement in a backward direction)
sub-	below, under	subcutaneous (under, below the skin)
super-	above, excess	supernumerary (above the normal number)
supra-	above	suprapubic (above the pubic bone)
tachy-	rapid, fast	tachycardia (fast heartbeat)
trans-	through, across	transurethral (across the urethra)
ultra-	beyond, excess	ultrasound (high-frequency sound waves)

Number Prefixes

These prefixes relate to quantity or measurement:

Prefix	Meaning	Example (Definition)
bi-	two	bilateral (two sides)
hemi-	half	hemiplegia (paralysis of one side/half of the body)
mono-	one	monoplegia (paralysis of one extremity)
multi-	many	multipara (a woman pregnant more than once)
nulli-	none	nulligravida (a woman with no pregnancies)
poly-	many	polyuria (large amounts of urine)

Med Term Tip

Be very careful with prefixes; many have similar spellings but very different meanings.

For example: anti- means "against"; ante- means "before"

inter- means "between"; intra-means "inside"

per- means "through"; peri- means "around"

quadr-	four	quadriplegia	(paralysis of all four extremities)
semi-	partial, half	semiconscious	(partially conscious)
tri-	three	triceps	(muscle with three heads)
uni-	one	unilateral	(one side)

Ending	Singular	Plural
-a	vertebra	vertebrae
-ax	thorax	thoraces
-ex / -ix	appendix	appendices
-is	metastasis	metastases
-ma	sarcoma	sarcomata
-nx	phalanx	phalanges
-on	ganglion	ganglia
-us	nucleus	nuclei
-um	ovum	ova
-y	biopsy	biopsies

Common Suffixes

When written by themselves, suffixes are preceded by a hyphen.

Suffix	Meaning	Example (Definition)
-algia	pain	gastralgia (stomach pain)
-cele	hernia, protrusion	cystocele (protrusion of the bladder)
-cise	cut	excise (to cut out)
-cyte	cell	erythrocyte (red cell)
-dynia	pain	cardiodynia (heart pain)
-ectasis	dilation	bronchiectasis (dilated bronchi)
-gen	that which produces	mutagen (that which produces mutations)

Suffix	Meaning	Example (Definition)
-genesis	produces, generates	osteogenesis (produces bone)
-genic	producing, produced by	carcinogenic (producing cancer)
-ia	state, condition	hemiplegia (condition of being half paralyzed)
-iasis	abnormal condition	lithiasis (abnormal condition of stones)
-ism	state of	hypothyroidism (state of low thyroid)
-itis	inflammation	cellulitis (inflammation of cells)
-logist	one who studies	cardiologist (one who studies the heart)
-logy	study of	cardiology (study of the heart)
-lysis	destruction	osteolysis (bone destruction)
-malacia	abnormal softening	chondromalacia (abnormal cartilage softening)
-megaly	enlargement, large	cardiomegaly (enlarged heart)
-oma	tumor, mass	carcinoma (cancerous tumor)
-osis	abnormal condition	cyanosis (abnormal condition of being blue)
-pathy	disease	myopathy (muscle disease)
-plasia	development, growth	dysplasia (abnormal development)
-plasm	formation, development	neoplasm (new formation)
-ptosis	drooping	proctoptosis (drooping rectum)

Suffix	Meaning	Example (Definition)
-rrhage	excessive, abnormal flow	hemorrhage (excessive bleeding)
-rhea	discharge, flow	rhinorrhea (discharge from the nose)

Suffix	Meaning	Example (Definition)
-rrhexis	rupture	hysterorrhexis (ruptured uterus)
-sclerosis	hardening	arteriosclerosis (hardening of an artery)
-stenosis	narrowing	angiostenosis (narrowing of a vessel)
-therapy	treatment	chemotherapy (treatment with chemicals)
-trophy	nourishment, development	hypertrophy (excessive development)

Adjective Suffixes

*The following suffixes are used to convert a word root into an adjective. These suffixes usually are translated as **pertaining to**.*

Suffix	Meaning	Example (Definition)
-ac	pertaining to	cardiac (pertaining to the heart)
-al	pertaining to	duodenal (pertaining to the duodenum)
-an	pertaining to	ovarian (pertaining to the ovary)
-ar	pertaining to	ventricular (pertaining to a ventricle)
-ary	pertaining to	pulmonary (pertaining to the lungs)
-eal	pertaining to	esophageal (pertaining to the esophagus)
-ic	pertaining to	gastric (pertaining to the stomach)
-ical	pertaining to	neurological (pertaining to the study of the nerves)
-ile	pertaining to	penile (pertaining to the penis)
-ior	pertaining to	superior (pertaining to above)
-ory	pertaining to	auditory (pertaining to hearing)
-ose	pertaining to	adipose (pertaining to fat)
-ous	pertaining to	intravenous (pertaining to within a vein)
-tic	pertaining to	acoustic (pertaining to hearing)

Surgical Suffixes

The following suffixes indicate surgical procedures.

Suffix	Meaning	Example (Definition)
-centesis	puncture to withdraw fluid	arthrocentesis (puncture to withdraw fluid from a joint)
-ectomy	surgical removal	gastrectomy (surgically remove the stomach)
-ostomy	surgically create an opening	colostomy (surgically create an opening for the colon through the abdominal wall)
-otomy	cutting into	thoracotomy (cutting into the chest)
-pexy	surgical fixation	nephropexy (surgical fixation of a kidney)
-plasty	surgical repair	dermatoplasty (surgical repair of the skin)
-rrhaphy	suture	myorrhaphy (suture together muscle)

Med Term Tip

Surgical suffixes have very specific meanings:

-otomy means "to cut into"

-ostomy means "to create a new opening"

-ectomy means "to cut out" or "remove"

Procedural Suffixes

The following suffixes indicate procedural processes or instruments.

Suffix	Meaning	Example (Definition)
-gram	record or picture	electrocardiogram (record of heart's electricity)
-graph	instrument for recording	electrocardiograph (instrument for recording the heart's electrical activity)
-graphy	process of recording	electrocardiography (process of recording the heart's electrical activity)
-meter	instrument for measuring	audiometer (instrument to measure hearing)
-metry	process of measuring	audiometry (process of measuring hearing)
-scope	instrument for viewing	gastroscope (instrument to view stomach)
-scopy	process of visually examining	gastroscopy (process of visually examining the stomach)