

Familiarity with these terms will greatly help you memorize the anatomical terms that you will have to learn in this course

EXERCISE 4 Prefixes Indicating Location, Direction, and Tendency

These prefixes are found at the beginning of many common everyday words. Can you think of another example in addition to the one given?

Prefix	Meaning	Example
ab-	from, away	abnormal: away from normal
ad-	to, near, toward	adrenal: adjoining the kidney
ante-	before	antepartum: before delivery
anti-	against	antiseptic: against infection
brady-	slow	bradycardia: slow heart rate
circum-	around	circumocular: around the eye
co-	with, together	coordination: working together
con-	with, together	congenital: with birth
contra-	against	contraindicated: not indicated
counter-	against	counterirritant: nonirritating
dis-	apart from	disarticulation: taking a joint apart
end-	within	endocardium: membrane lining the inside of the heart
epi-	upon	epidermis: upon the dermal layer of skin
ex-	out from	exhale: to breathe out
hyper-	above	hypertension: higher than normal blood pressure
hypo-	under	hypodermic: under the skin
im-	not	immature: not mature
in-	not	incurable: not curable
infra-	under	infrapatellar: under the kneecap
media-	middle	mediastinum: region of the chest cavity between the lungs
peri-	around	pericardium: membrane around the heart
post-	after	postmortem: after death
pre-	before	prenatal: before birth
pro-	before	prognosis: a prediction
super-	above	superciliary: above the eyebrow
supra-	above	suprapubic: above the pubic bone
sym-	with, together	symphysis: a fusion
syn-	with, together	synanthrosis: a bony union
tach-	rapid	tachycardia: rapid heart rate
trans-	through	transurethral: through the urethra

Question 1.5

Give an example (not the one given in the table) for each of the following prefixes:

ad:

con:

ex:

hyper:

super:

EXERCISE 5

Prefixes Denoting Organs and Structures

It is essential to know the prefixes in the following list. Check off those with which you are already familiar and learn those that are new to you.

Question 1.6

Think of a word that uses each of the following medical terms:

gastro:

hepato:

derm:

Prefix	Meaning	Example
abdomin/o-	abdomen	abdominal: pertaining to the abdomen
acr/o-	extremity	acromegaly: having unusually large extremities
aden/o-	gland	adenitis: inflammation of a gland
angi/o-	vessel	angiogram: visualization of blood vessels
arthr/o-	joint	arthritis: inflammation of a joint
cardi/o-	heart	cardiology: study of the heart
chol/e-	gallbladder	cholecystitis: inflammation of the gallbladder
chondr/o-	cartilage	chondroma: a cartilaginous tumor
cyst/o-	bladder	cystoscopy: examination of the inside of the bladder
cyt/o-	cell	cytokinesis: cytoplasmic division
dent/o-	tooth	dental: referring to the teeth
dermat/o-	skin	dermatologist: physician specializing in skin diseases
or derm/o-		
duoden/o-	duodenum	duodenal: having to do with the duodenum (first portion of small intestine)
enter/o-	intestine	enteric: relating to the intestine
gastr/o-	stomach	gastroscope: viewing the interior surface of the stomach
hepat/o-	liver	hepatitis: inflammation of the liver
laryn/go-	larynx	laryngoscope: instrument for viewing inside the larynx
my/o-	muscle	myocardium: heart muscle
nephr/o-	kidney	nephrology: study of the kidneys
neur/o-	nerve	neurologist: physician specializing in diseases of the nervous system
ocul/o- or opt/o-	eye	optical: pertaining to vision
oste/o-	bone	osteocyte: bone cell
ot/o-	ear	otology: study of the ear
path/o-	disease	pathological: relating to disease
pneumon/o-	lung	pneumonia: inflammation of the lung
rhin/o-	nose	rhinitis: inflammation of the nasal passages
stomat/o-	mouth	stomatitis: inflammation of the mouth
thorac/o-	thorax (chest)	thoracentesis: puncture of the thorax for the removal of fluid

EXERCISE 6**Prefixes Denoting Number and Measurement**

The following quantitative terms are common; review their meanings.

Prefix	Meaning	Example
uni-	one	unicellular: consisting of one cell
mon-	one	mononuclear: having one nucleus
bi-	two	bilateral: affecting two sides
bin-	two	binocular: two-eyed
di-	two	dicephalic: two-headed
ter-	three	tertiary: of the third stage
tri-	three	trilobar: having three lobes
quadr-	four	quadriceps femoris: group of four muscles in the thigh
tetra-	four	tetralogy of Fallot: heart anomaly having four features
poly-	many	polydactyly: having (abnormally) many digits
macr-	large	macrocephalic: having an exceptionally large head
mega-	great	megadontia: having exceptionally large teeth
micro-	small	microscope: an instrument for viewing small objects
oligo-	few	oliguria: excretion of small amounts of urine

EXERCISE 7**Suffixes Denoting Relations, Conditions, and Agents**

Suffixes add specificity to words. Think of additional examples for the following suffixes.

Suffix	Meaning	Example
-ac	related to	cardiac: relating to the heart
-ious	related to	contagious: communicable by touch
-ic	related to	pyloric: relating to the pyloric valve
-ism	condition	mutism: inability to speak
-osis	condition	tuberculosis: infection by tuberculosis bacteria
-tion	condition	constipation: condition of passing infrequent and hard stools
-ist	agent (one who practices)	ophthalmologist: medical specialist who treats eye disorders
-or	agent	operator
-er	agent	examiner
-ician	agent	physician

EXERCISE 8 Suffixes Used in Operative Terminology

These suffixes are essential to clinical practice. Some may be more familiar to you than others.

Question 1.7

How does an -ectomy differ from an -ostomy and -otomy?

Suffix	Meaning	Example
-centesis	to puncture	amniocentesis: puncture of the amniotic sac
-ectomy	to cut out or remove	appendectomy: excision of the appendix
-ostomy	to cut to form an opening	colostomy: opening formed in the large intestine and draining to the outside
-otomy	to cut into	tracheotomy: cut into the trachea
-pexy	to fix or repair	gastropexy: repair of the stomach
-plasty	to repair or reform	rhinoplasty: repair of the nose
-(r)rhaphy	to suture	arteriorrhaphy: suture of an artery
-scopy	to view	otoscopy: to view the ear canal

EXERCISE 9 Miscellaneous Suffixes

These suffixes are relevant to your study. Check off those you know and learn those that you do not know.

Question 1.8

Write another example using each of the following suffixes:

_____ algia

_____ itis

_____ ology

Suffix	Meaning	Example
-algia	pain	neuralgia: nerve pain
-emia	of the blood	bacteremia: bacteria in the blood
-gram	writing	electrocardiogram: tracing of the electrical activity of the heart
-itis	inflammation of	appendicitis: inflammation of the appendix
-ology	study of	ophthalmology: study of the eye
-orrhea	flow	amenorrhea: cessation of menstrual flow
-phobia	fear of	claustrophobia: fear of confined spaces

SELF-TEST

Medical Terminology

UNIT

1

SENTENCE COMPLETION

Choose the correct response for Questions 1–4 from the answers listed below:

- | | |
|--------------|-------------|
| a. anterior | e. distal |
| b. posterior | f. proximal |
| c. medial | g. coronal |
| d. lateral | h. sagittal |

- _____ 1. The plane of the body dividing it into right and left sections is _____.
- _____ 2. The hip is _____ to the ankle.
- _____ 3. The navel is _____ to the spinal cord.
- _____ 4. The great toe is _____ to the little toe.

MATCHING

Column A

Column B

- | | |
|-------------------------------------|--------------------|
| _____ 5. Study of the heart | a. cardiology |
| _____ 6. Inflammation of the skin | b. cholecystectomy |
| _____ 7. Removal of the gallbladder | c. dermatitis |
| _____ 8. Pain in a muscle | d. myalgia |

MULTIPLE CHOICE

- _____ 9. Which of the following is located in the midsagittal plane of the body?
- | | |
|---------|------------------|
| a. foot | c. leg |
| b. toe | d. spinal column |
- _____ 10. The kidneys are located primarily in the _____ regions of the abdomen.
- | | |
|------------------|---------------|
| a. hypochondriac | c. epigastric |
| b. hypogastric | d. lumbar |
- _____ 11. When a surgeon amputates a leg, he or she makes a _____ cut through the bone.
- | | |
|-------------|-----------------|
| a. sagittal | c. transverse |
| b. coronal | d. longitudinal |

- _____ 12. A term describing a structure that surrounds an organ is
a. transurethral. c. antepartum.
b. pericardium. d. superciliary.
- _____ 13. In a quadruped organism, such as the cat, the cranial portion of the body is referred to as
a. anterior. c. dorsal.
b. posterior. d. superior.
- _____ 14. A cytological examination involves observing
a. the inside of the bladder. c. tissues.
b. cells. d. behavior.
- _____ 15. A person with pneumonitis would most likely have which of these symptoms?
a. painful urination c. difficulty breathing
b. inability to swallow d. nausea and vomiting
- _____ 16. What is the medical term for inflammation of a kidney?
a. neuritis c. cystorrhaphy
b. nephrotomy d. nephritis
- _____ 17. Viewing the inside of the duodenum is known as
a. duodenology. c. duodenectomy.
b. duodenoscopy. d. duodenitis.
- _____ 18. A person with otitis may have difficulty
a. hearing. c. smelling.
b. seeing. d. tasting.
- _____ 19. When puncturing the chest cavity with a needle, a surgeon performs a
a. pneumonectomy. c. thoracentesis.
b. pneumonostomy. d. thoracotomy.
- _____ 20. Which abdominal region is inferior to the umbilical region?
a. left hypochondriac c. hypogastric
b. epigastric d. right iliac

WORD RELATIONSHIPS

Which is an *incorrect* word relationship in each of the following questions?

- _____ 21. a. *anti* = before c. *brady* = slow
b. *bi* = two d. *cyst* = bladder
- _____ 22. a. *cyto* = cell c. *epi* = top
b. *entero* = intestine d. *hyper* = below
- _____ 23. a. *algia* = pain c. *gram* = tracing, mark
b. *ectomy* = cut out d. *itis* = draining
- _____ 24. a. *centesis* = puncture c. *gastro* = kidney
b. *ology* = study d. *pexy* = repair
- _____ 25. a. *derm* = skin c. *aden* = gland
b. *arthr* = joint d. *opt* = ear