



Common Prefixes and Suffixes

2

LEARNING OUTCOMES

Upon completion of this chapter, you should be able to:

- Recognize prefixes.
- Recognize suffixes.
- Define all of the prefixes and suffixes presented in this chapter.
- Analyze and define new terms introduced in this chapter.
- Pronounce, define, and spell each term introduced in this chapter.

INTRODUCTION

Chapter 1 presented the four word parts used in medical terminology: prefixes, roots, suffixes, and combining forms. This chapter focuses on prefixes and suffixes.

In Chapter 1, we learned that a prefix is a word part that comes at the beginning of a word. Note that the word *prefix* itself contains a prefix, *pre-*. The second part of the word *prefix* is “fix,” which gives us a perfect definition of prefix: something affixed (attached) to the front of or before (*pre-*) something else. Most of the prefixes occurring in medical terms are also found in everyday English. Although we have all used many of the prefixes contained in this chapter, we may have done so without realizing that they are prefixes. For example, when we are admitted to an anteroom, we may not stop to think that the prefix *ante-* means “before,” and that an *anteroom* is so called because it is a room we enter before entering another room.

We also learned in Chapter 1 that a suffix is the part that comes at the end of a word. The word *suffix* comes from the Latin word *suffixum*, which may be translated as “to fasten to the end of.” Although the suffix is located last in a medical term, it often comes first in its definition. For example, *appendicitis* means “inflammation (*-itis*) of the appendix.” Therefore, the suffix, *-itis*, provides us with the first word of the defining phrase. The term *gastrectomy* is another example. It is defined as “removal of the stomach.” The definition begins with the meaning of the suffix, *-ectomy*, which means “removal of.”

WORD ROOTS INTRODUCED IN THIS CHAPTER

Table 2-1 lists common word roots with their meanings to get you started on your task of learning hundreds of medical terms. You may wish to memorize the roots given in the table now, because there are just a few. Or if you prefer, just give them a quick glance now and, as you go through the chapter, refer back to this table whenever you run across a term with a root you do not recognize.

TABLE 2-1 COMMON WORD ROOTS AND MEANINGS

Word Root	Meaning
arter/i/o	artery
arthr/o	joint
card/i/o	heart
derm/at/o	skin
gen/i/o	origin, cause, formation
ger/o/onto	old age
hem/a/t/o	blood
iatr/o	physician
muscul/o	muscle
neur/o	nerve, nerve tissue
oste/o	bone
path/o	disease
ped/i/o	child
phren/o	diaphragm, mind
psych/o	mind
skelet/o	skeleton
spin/o	spine
tend/i/n/o	tendon

CATEGORIES OF PREFIXES

Not all medical terms include a prefix, but when one is present, it is critical to the term's meaning. For example, **hyperglycemia** (high blood sugar) and **hypoglycemia** (low blood sugar) are conditions that are exact opposites. Confusing those two prefixes creates errors. Two other similar-sounding prefix pairs prone to creating errors are ante- and anti-. The prefix *ante-* means “before,” and the prefix *anti-* means “against.”

Term	Part	Meaning
hypoglycemia	prefix: hypo- = low root: glyc/o- = sugar suffix: -emia = condition	low blood sugar
antecubital	prefix: ante- = before root: cubitum = elbow	anterior to the elbow
anticoagulant	prefix: anti- = against root: coagulant = substance that causes blood to clot	preventing coagulation (clotting)

Dividing prefixes into functional categories makes them easier to learn. There are five logical divisions:

- Prefixes of time or speed
- Prefixes of direction
- Prefixes of position
- Prefixes of size or number
- Prefixes of negation

TABLE 2-2 PREFIXES OF TIME OR SPEED

Prefix	Refers to	Example	Meaning
ante-, pre-	before	antepartum, premature	before birth, before full development
brady-	abnormally slow rate of speed	bradycardia	abnormally slow heartbeat
neo-	new	neonatal	newborn (adjective)
post-	after	postscript	a written thought added after the main message
tachy-	rapid, abnormally high rate of speed	tachycardia	abnormally fast heartbeat

Seeing prefixes in words we already know helps us learn their meanings quickly and enables us to understand medical terms we encounter later on. For that reason, common English words are included as examples in some of the following paragraphs and tables.

Prefixes of Time or Speed

Prefixes denoting time or speed are used in everyday English. **Prehistoric** and **postgraduate** are common words with a prefix relating to time. Prefixes denoting speed, such as **tachy-** (fast) and **brady-** (slow), are often used to describe heart rate. [Table 2-2](#) lists prefixes related to time or speed.

Prefixes of Direction

The word **abnormal** is an example of a word containing a prefix that signifies direction. We use such prefixes in everyday life without bothering to analyze them. For example, we normally would not take the time to think about the prefix **contra-** (against) in the word contradiction, yet we understand its meaning. Prefixes related to direction are listed in [Table 2-3](#).

Prefixes of Position

Infrastructure (*infra-* means inside or below), **interstate** (*inter-* means between), and **paralegal** (*para-* means alongside) are all words we frequently use that include prefixes of position. Having these prefix meanings already in our working vocabularies makes it easier to learn their medical uses. Prefixes of position are commonly used during diagnostic and treatment procedures. [Table 2-4](#) lists prefixes relating to position.

TABLE 2-3 PREFIXES OF DIRECTION

Prefix	Refers to	Example	Meaning
ab-	away from, outside of, beyond	abnormal	not normal
ad-	toward, near to	adjective	toward a noun
con-, sym-, syn-	with, within	congenital, sympathetic, synthetic	with (or at) birth, with feeling toward, with the same idea or purpose
contra-	against	contraband	substance against the law
dia-	across, through	diameter	a line through the middle

TABLE 2-4 PREFIXES OF POSITION

Prefix	Refers to	Example	Meaning
ec-, ecto-, ex-, exo-	outside	extraction	removal to the outside
en-	inside	encephalopathy	disease inside the head, brain disease
endo-	within	endoscopy	visual examination of the inside of some part of the body
epi-	upon, subsequent to	epigastric	adjective referring to something above the stomach
extra-	beyond	extracellular	adjective referring to something outside a cell or cells
hyper-	above, beyond normal	hyperglycemia	high blood sugar
hypo-	low, below, below normal	hypogastric	region beneath the stomach
infra-	inside or below	infrarenal	adjective referring to something below the kidneys
inter-	between	interosseous	between bones
intra-	inside, within	intracerebral	inside the cerebrum
meso-	middle	mesothelioma	tumor arising from the mesothelium
meta-	beyond	metacarpal	the bone beyond the carpus; one of five bones in either hand
pan-	all or everywhere	pancarditis	general inflammation of the heart
para-	alongside, near	paraplegia	paralysis of the lower half of the body
peri-	around	perivascular	in the tissues surrounding a vessel
retro-	backward, behind	retrosternal	adjective referring to something behind the sternum

Prefixes of Size and Number

A **semiannual** (semi- means “half,” annual means “yearly”) sale is one that occurs every 6 months. The **unicorn** (uni- means “one”) is a fictitious creature that has one horn. Prefixes of size and number are very common. **Table 2-5** lists prefixes related to size and number.

TABLE 2-5 PREFIXES OF SIZE AND NUMBER

Prefix	Refers to	Example	Meaning
bi-	two	biannual	twice per year
di-, dipl-	two, twice	diplopia	double vision
hemi-	half	hemiplegia	paralysis of one body side
macro-	big	macrocyte	big cell
micro-	small	microscope	instrument to view small objects
mono-	one	monocyte	cell with one nucleus
olig-, oligo-	a few, a little	oliguria	scant urine production
pan-	all or everywhere	pancarditis	whole heart inflammation
poly-	many	polydactyly	more than five hand or foot digits

TABLE 2-5 PREFIXES OF SIZE AND NUMBER (*continued*)

Prefix	Refers to	Example	Meaning
quadri-	four	quadriplegia	paralysis of all four limbs
semi-	half, partial	semiannual	occurring every half year
tetra-	four	tetradactyl	having only four hand or foot digits
tri-	three	triceps	three-headed muscle
uni-	one	unicellular	one-celled

Prefixes of Negation

Negation means absence or opposite of something. These include words like antidepressant (anti- means “against”) and decriminalize (de- means “without”). Table 2-6 lists prefixes related to negation.



Quick Check

Define each prefix and state whether it refers to time, speed, position, direction, number, or negation.

1. anti- _____
2. hyper- _____
3. tachy- _____

CATEGORIES OF SUFFIXES

Dividing suffixes into functional categories makes them easier to learn than they would be otherwise. A suffix adds to or changes a root in one of four different ways. Suffixes:

- Signify a medical condition.
- Signify a diagnostic term, test information, or surgical procedure.
- Name a medical practice or practitioner.
- Convert a noun to an adjective.

The suffix -stenosis, for example, indicates a narrowing or blockage in a body part, which is a condition. Consider the term arteriostenosis. Because the root arter/i/o means artery, we may conclude that arteriostenosis is a narrowing of an artery. Note how this term is divided into word parts:

Term	Part	Meaning
arteriostenosis	root: arter/i/o = artery suffix: -stenosis = narrowing	narrowing of an artery

TABLE 2-6 PREFIXES OF NEGATION

Prefix	Refers to	Example	Meaning
a-, an-	not	anuria	not able to urinate
anti-	against, opposed	antibiotic	drug that inhibits microbes
de-	without	dehumidifier	device that removes water
dis-	remove	disable	put out of action

Suffixes Signifying Medical Conditions

The suffix **-porosis**, which means porous, is added to the root **oste/o**, to form the term **osteoporosis**, which means “a porous condition of bone.” See [Table 2-7](#) for more examples.

TABLE 2-7 SUFFIXES THAT SIGNIFY MEDICAL CONDITIONS

Suffix	Meaning of the Suffix	Example	Meaning of the Example
-algia, -dynia	pain	arthralgia, arthrodynia	pain in a joint
-cele	protrusion, hernia	rectocele	hernia of the rectum
-cyte	cell	leukocyte	white blood cell
-ectasis, -ectasia	expansion or dilation	angiectasis	dilation of a vessel
-edema (also a standalone word)	excessive fluid	angioedema	fluid buildup that causes swelling under the skin
-emesis	vomiting	hematemesis	vomiting of blood
-emia	blood	uremia	urea in the blood
-iasis	condition or state	cholelithiasis, sometimes also spelled “chololithiasis”	stones in the gallbladder or bile ducts
-ism	a condition of, a process, or a state of	hypothyroidism	condition characterized by thyroid hormone deficiency
-itis	Inflammation	appendicitis	inflammation of the appendix
-lith	stone, calculus, calcification	pneumolith	a stone in the lung
-lysis	disintegration, breaking down	hemolysis	rupture of red blood cells
-malacia	softening	osteomalacia	softening of the bones
-megaly	enlargement	gastromegaly	enlargement of the stomach
-oid	resembling or like	opioid	substance that resembles opium
-oma	tumor	gastroma	tumor of the stomach
-osis	abnormal condition	osteoporosis	condition of porous bones
-pathy	disease	myopathy	disease of the muscle
-penia	reduction of size or quantity	leukopenia	low number of white blood cells
-phobia	fear	carcinophobia	fear of cancer
-plasia	abnormal formation	neoplasia	abnormal growth of cells
-plegia	paralysis	hemiplegia	paralysis on one side of the body
-pnea	breathing	tachypnea	rapid breathing
-poiesis	producing	erythropoiesis	production of red blood cells
-porosis	porous condition	osteoporosis	porous
-ptosis	downward displacement	nephroptosis	downward displacement of a kidney
-rrhage	flowing forth	hemorrhage	significant discharge of blood from blood vessels
-rrhea	discharge	rhinorrhea	discharge from the nose (runny nose)

TABLE 2-7 SUFFIXES THAT SIGNIFY MEDICAL CONDITIONS (*continued*)

Suffix	Meaning of the Suffix	Example	Meaning of the Example
-rrhexis	rupture	hysterorrhexis	rupture of the uterus
-sclerosis	hardness	atherosclerosis	hardening of the arteries
-spasm	muscular contraction	angiospasm	muscular contraction of a vessel
-stasis	level, unchanging	thermostasis	a constant, consistent internal body temperature
-stenosis	a narrowing	arteriostenosis	narrowed arteries

Suffixes Signifying Diagnostic Terms, Test Information, or Surgical Procedures

Suffixes that form terms related to test information, diagnoses, and procedures are often attached to a root that signifies a body part. The term **appendectomy** is an example. The suffix **-ectomy** means “removal of,” and **append** is the root for appendix. Thus, the term means “removal of the appendix.” **Table 2-8** lists common suffixes that signify diagnostic terms, test information, or surgical procedures.

Suffixes That Name a Medical Practice or Practitioner

Some suffixes relating to a medical practice or practitioner are derived from the Greek word *iatros*, which means “physician” or “medical treatment.” This Greek word is the source of the

TABLE 2-8 SUFFIXES THAT SIGNIFY DIAGNOSTIC TERMS, TEST INFORMATION, OR SURGICAL PROCEDURES

Suffix	Refers to	Example
-centesis	surgical puncture	thoracentesis
-desis	surgical binding	arthrodesis
-ectomy	surgical removal	appendectomy
-gen, -genic, -genesis	origin, producing	osteogenic
-gram	a recording, usually by an instrument	electrocardiogram
-graph	instrument for making a recording	electrocardiograph
-graphy	act of graphic or pictorial recording	electrocardiography
-meter	instrument for measuring	audiometer
-metry	act of measuring	audiometry
-opsy	examination	autopsy
-pexy	surgical fixation	hysteropexy
-plasty	surgical repair	rhinoplasty
-rrhaphy	suture	herniorrhaphy
-scope	instrument for viewing	arthroscope
-scopy	act of viewing	arthroscopy
-stomy	artificial or surgical opening	tracheostomy
-tome	instrument for cutting	dermatome
-tomy	incision	colotomy
-tripsy	crushing	lithotripsy

TABLE 2-9 SUFFIXES THAT SIGNIFY MEDICAL PRACTICE AND PRACTITIONERS

Suffix	Refers to	Example
-ian	specialist	pediatrician
-iatrics	medical specialty	pediatrics
-iatry	medical specialty	psychiatry
-ics	medical specialty	orthopedics
-ist	specialist in a field of study	orthopedist
-logy	study of	gynecology

root *iatr/o*. For practical purposes, you may consider the root *iatr* as an integral part of the suffixes *-iatriic* and *-iatr*, as in the terms *geriatrics*, *psychiatric*, *psychiatry*, *psychiatrist*, *pediatrics*, and *pediatrician*. Although both *-ician* and *-ist* are used in referring to a specialist, the suffix *-ist* is perhaps the more common one. An example is **gerontologist**, a physician who diagnoses and treats disorders of aging.

Terms denoting a field or medical specialty may also end with the suffix *-logy*. **Table 2-9** lists the suffixes for medical practice and practitioners.

Root, prefix, or suffix? The word part **gen** can act as a suffix or a root, but, as is the case with **iatro-**, it combines nicely with several suffixes and may be considered as a part of them. Terms formed with **-genic** are adjectives, because of the *-ic* ending. As we will see later, *-ic* can act as a suffix by itself, too.

Suffixes That Denote Adjectives

As with suffixes that signify medical practice and practitioners, suffixes used to create adjective forms are not governed by a clear set of rules. Nevertheless, there are some rules that come into play, such as the rules of English pronunciation. For example, we replace the final letter, *x*, in the word *appendix* with a *c* to form the adjective *appendicitis* because “appendixitis” does not sound much like an English word.

In creating adjectives, we also sometimes change noun terms that name specialties. For example, *psychiatry* and *pediatrics* are the names of specialties. Dropping the *y* from *psychiatry* and adding the adjective suffix *-ic* converts the specialty name to an adjective:

psychiatric medicine
psychiatric hospital

With *pediatrics*, on the other hand, all we need to do to form the adjective is drop the *s*:

pediatric medicine
pediatric hospital

Examples of adjective suffixes are listed in **Table 2-10**.

Prefixes and suffixes presented in this chapter will become familiar as you progress through the next chapters on body systems. Review the following study tables and do the self-testing exercises.

TABLE 2-10 SUFFIXES THAT DENOTE ADJECTIVES

Suffix	Refers to	Example
-ac, -al, -an, -aneous, -ar, -ary, -eal, -eous, -iac, -iatric, -ic, -ical, -oid, -otic, -ous, -tic, -ular	converts a root or noun to an adjective	geriatric, orthopedic, ocular

Study Table  COMMON PREFIXES		
PREFIX	MEANING	EXAMPLE
a-, an-	not	anemic
ab-	away from, outside of, beyond	abnormal
ad-	toward, near to	addiction
ante-, pre-	before	antepartum, premature
anti-	against, opposed	antibiotic
bi-	two	bipolar
brady-	abnormally slow rate of speed	bradycardia
con-, sym-, syn-	with	congenital, sympathetic, synarthrosis
contra-	against	contralateral
de-	not	deodorant
di-, diplo-	two, twice	dipole
dia-	across, through	diagnosis
dis-	remove	disinfect
dys-	painful, bad, difficult	dyspnea
ec-, ecto-	outside, away from	ectopy
en-	inside	endosteum
endo-	within	endoderm
epi-	upon, subsequent to	epigastric
ex-, exo-	outside	exoskeleton
extra-	beyond	extrasystole
hemi-	half	hemiplegia
hyper-	above, beyond normal	hypergastric
hypo-	below, below normal	hypogastric
infra-	inside or below	infrastructure
inter-	between	intercostal
intra-	inside	intracerebral
macro-	big	macrophage
meso-	middle	mesothelium
meta-	beyond	metacarpal
micro-	small	microscope
mono-, uni-	one	monocyte
neo-	new	neoplasm
olig-, oligo-	a few, a little	oliguria
pan-	everywhere	pandemic
para-	alongside, near	paraplegia

(continued)

Study Table  **COMMON PREFIXES** (continued)

PREFIX	MEANING	EXAMPLE
peri-	around	perimeter
post-	after	postsynaptic
quadri-	four	quadriceps
retro-	backward, behind	retroperitoneal
semi-	half, partial	semiconscious
tachy-	rapid	tachycardia
tetra-	four	tetradactyl
tri-	three	triceps
uni-	one	unilateral

Study Table  **COMMON SUFFIXES**

SUFFIX	MEANING	EXAMPLE
-ac, -al, -an, -aneous, -ar, -ary, -eal, -eous, -iac, -iatic, -ic, -ical, -oid, -otic, -ous, -tic, -ular	converts a root or a noun term to an adjective	geriatric, orthopedic, ocular, dental, cutaneous, cyanotic, atrial, cardiac, ureteral
-algia, -dynia	pain	urodynia
-cele	protrusion, hernia	rectocele
-centesis	surgical puncture	thoracentesis
-cyte	cell	leukocyte
-desis	surgical binding	arthrodesis
-ectasis, -ectasia	expansion or dilation	angiectasis
-ectomy	surgical removal	appendectomy
-edema	excessive fluid in intracellular tissues	angioedema
-emesis	vomiting	hematemesis
-emia	blood	uremia
-genic	origin, producing	osteogenic
-gram	a recording, usually by an instrument	electrocardiogram
-graph	instrument for making a recording	electrocardiograph
-graphy	act of graphic or pictorial recording	electrocardiography
-ian, -iatrist, -ist, -logist, -logy, -ics, -iatry, -iatrics	specialty of, study of, practice of	geriatrist, pediatrician, gynecology
-iasis	condition or state	cholelithiasis
-ism	a condition of, a process, or a state of	gigantism, hyperthyroidism

Study Table  COMMON SUFFIXES (continued)		
SUFFIX	MEANING	EXAMPLE
-itis	inflammation	appendicitis
-lith	stone, calculus, calcification	pneumolith
-lysis	disintegration	hemolysis
-malacia	softening	osteomalacia
-megaly	enlargement	gastromegaly
-meter	device for measuring	audiometer
-metry	act of measuring	audiometry
-oid	resembling or like	android, mucoid
-oma	tumor	gastroma
-opsy	visual examination	biopsy
-osis	abnormal condition	osteoporosis, arthrosis
-pathy	disease	cardiopathy
-penia	reduction of size or quantity	leukopenia
-pexy	surgical fixation	hysteropexy
-phobia	fear	claustrophobia
-plasia	abnormal formation	chondroplasia
-plasty	surgical repair	rhinoplasty
-plegia	paralysis	hemiplegia
-pnea	breath, respiration	tachypnea
-poiesis	producing	erythropoiesis
-porosis	porous condition	osteoporosis
-ptosis	downward displacement	nephroptosis
-rrhage	flowing forth	hemorrhage
-rrhaphy	suture	herniorrhaphy
-rrhea	discharge	diarrhea
-rrhexis	rupture	hysterorrhexis
-sclerosis	hardness	arteriosclerosis
-scope	instrument for viewing	arthroscope
-scopy	act of viewing	arthroscopy
-spasm	muscular contraction	arteriospasm
-stasis	level, unchanging	hemostasis
-stenosis	a narrowing	arteriostenosis
-stomy	permanent opening	colostomy
-tome	instrument for cutting	osteotome
-tomy	incision	osteotomy
-tripsy	crushing	lithotripsy

END-OF-CHAPTER EXERCISES

EXERCISE 2-1



ADDING PREFIXES OF TIME OR SPEED

Form a new word by adding each prefix in the list to the word appearing next to it. Then write the meaning of the new word in the space to the right. Refer to a dictionary as needed.

PREFIX	WORD	NEW WORD	MEANING
1. ante-	room	_____	_____
2. neo-	classic	_____	_____
3. post-	glacial	_____	_____
4. pre-	dominant	_____	_____
5. tacho-	meter	_____	_____

EXERCISE 2-2



ADDING PREFIXES OF DIRECTION

Form a new word by adding each prefix in the list to the word appearing next to it. Then write the meaning of the new word in the space to the right. Refer to a dictionary as needed.

PREFIX	WORD	NEW WORD	MEANING
1. ab-	normal	_____	_____
2. ad-	joining	_____	_____
3. con-	centric	_____	_____
4. contra-	lateral	_____	_____
5. dia-	gram	_____	_____
6. sym-	pathetic	_____	_____
7. syn-	thesis	_____	_____

EXERCISE 2-3



ADDING PREFIXES OF POSITION

Form a new word by adding each prefix in the list to the word or word part appearing next to it. Then write the meaning of the new word in the space to the right. Refer to a dictionary as needed.

PREFIX	WORD/WORD PART	NEW WORD	MEANING
1. ec-	centric	_____	_____
2. ecto-	morph	_____	_____

3. en-	slave	_____	_____
4. endo-	cardial	_____	_____
5. epi-	demic	_____	_____
6. ex-	change	_____	_____
7. exo-	sphere	_____	_____
8. extra-	terrestrial	_____	_____
9. hyper-	sensitive	_____	_____
10. hypo-	thesis	_____	_____
11. infra-	structure	_____	_____
12. inter-	collegiate	_____	_____
13. intra-	mural	_____	_____
14. meso-	sphere	_____	_____
15. meta-	physics	_____	_____
16. pan-	orama	_____	_____
17. para-	legal	_____	_____

EXERCISE 2-4**ADDING PREFIXES OF SIZE OR NUMBER**

Form a new word by adding each prefix in the list to the word or word part appearing next to it. Then write the meaning of the new word in the space to the right. Refer to a dictionary as needed.

PREFIX	WORD/WORD PART	NEW WORD	MEANING
1. bi-	annual	_____	_____
2. hemi-	sphere	_____	_____
3. macro-	cosm	_____	_____
4. micro-	scope	_____	_____
5. mono-	rail	_____	_____
6. olig-	archy	_____	_____
7. quadri-	lateral	_____	_____
8. semi-	annual	_____	_____

9. tri- angle

10. uni- cycle

EXERCISE 2-5**COMBINING ROOTS AND SUFFIXES THAT DENOTE MEDICAL CONDITIONS**

Build new words by combining the correct form of each of the roots with the suffixes appearing next to it. Suffixes and their definitions may be found in the Common Suffixes Study Table in this chapter. Then write the meaning of the new word in the space to the right. Refer to a medical dictionary as needed.

ROOT	SUFFIX	NEW WORD	MEANING
1. card/i/o	-cele	<hr/>	<hr/>
	-dynia	<hr/>	<hr/>
	-ectasia	<hr/>	<hr/>
	-itis	<hr/>	<hr/>
	-malacia	<hr/>	<hr/>
	-megaly	<hr/>	<hr/>
	-ptosis	<hr/>	<hr/>
	-plegia	<hr/>	<hr/>
	-rrhexis	<hr/>	<hr/>
	-spasm	<hr/>	<hr/>
2. dermat/o	-itis	<hr/>	<hr/>
	-oma	<hr/>	<hr/>
	-megaly	<hr/>	<hr/>
	-osis	<hr/>	<hr/>
3. hem/o, hemat/o	-lysis	<hr/>	<hr/>
	-genesis	<hr/>	<hr/>
	-oma	<hr/>	<hr/>
	-osis	<hr/>	<hr/>
4. neur/o	-algia	<hr/>	<hr/>
	-ectasis	<hr/>	<hr/>
	-itis	<hr/>	<hr/>
	-oma	<hr/>	<hr/>

5. oste/o	-dynia	_____	_____
	-oma	_____	_____
	-malacia	_____	_____
	-penia	_____	_____
	-porosis	_____	_____
	-itis	_____	_____
6. psych/o	-osis	_____	_____

EXERCISE 2-6

COMBINING ROOTS AND SUFFIXES THAT DENOTE DIAGNOSTIC TERMS, TEST INFORMATION, OR SURGICAL PROCEDURES

Build new words by combining the correct form of each of the roots with the suffixes appearing next to it. Suffixes and their definitions may be found in the Common Suffixes Study Table in this chapter. Then write the meaning of the new word in the space to the right. Refer to a medical dictionary as needed.

ROOT	SUFFIX	NEW WORD	MEANING
1. card/i/o	-genic	_____	_____
	-gram	_____	_____
	-graph	_____	_____
	-graphy	_____	_____
	-pathy	_____	_____
	-rrhaphy	_____	_____
2. dermat/o	-plasty	_____	_____
3. hemat/o	-genesis	_____	_____
	-metry	_____	_____
4. neur/o	-ectomy	_____	_____
	-genic	_____	_____
	-genesis	_____	_____
5. oste/o	-rrhaphy	_____	_____
	-plasty	_____	_____
	-genesis	_____	_____
	-ectomy	_____	_____
	-tomy	_____	_____

6. path/o	-gen	_____	_____
	-genic	_____	_____
	-genesis	_____	_____
7. psych/o	-genic	_____	_____
	-genesis	_____	_____
	-metry	_____	_____
	-pathy	_____	_____

EXERCISE 2-7
**COMBINING ROOTS AND SUFFIXES ASSOCIATED
WITH A MEDICAL PRACTICE OR PRACTITIONER**

Build new words by combining the correct form of each of the roots with the suffixes appearing next to it. Suffixes and their definitions may be found in the Common Suffixes Study Table in this chapter. Then write the meaning of the new word in the space to the right. Refer to a medical dictionary as needed.

ROOT	SUFFIX	NEW WORD	MEANING
1. card/i/o	-logy	_____	_____
	-logist	_____	_____
2. derm/o, dermat/o	-logy	_____	_____
	-logist	_____	_____
3. ger/o/nt/o	-iatrics	_____	_____
	-logy	_____	_____
	-logist	_____	_____
4. hem/o, hemat/o	-logy	_____	_____
	-logist	_____	_____
5. neur/o	-logy	_____	_____
	-logist	_____	_____
6. oste/o	-logy	_____	_____
	-logist	_____	_____
7. path/o	-logy	_____	_____
	-logist	_____	_____
8. psych/o	-logy	_____	_____
	-iatry	_____	_____
	-iatrist	_____	_____

EXERCISE 2-8**COMBINING ROOTS AND SUFFIXES THAT DENOTE ADJECTIVES**

Build new words by combining the correct form of each of the roots with the suffixes appearing next to it. Suffixes and their definitions may be found in the Common Suffixes Study Table in this chapter. Then write the meaning of the new word in the space to the right. Refer to a medical dictionary as needed.

ROOT	SUFFIX	NEW WORD	MEANING
1. card/i/o	-ac	_____	_____
2. hem/o, hemat/o	-toxic	_____	_____
3. derm/o, dermat/o	-al	_____	_____
	-ic	_____	_____
4. ger/o, geront/o	-iatric	_____	_____
	-al	_____	_____
5. neur/o	-al	_____	_____
	-ic	_____	_____
6. spin/o	-al	_____	_____
	-ous	_____	_____
7. oste/o	-al	_____	_____
	-oid	_____	_____

EXERCISE 2-9**MATCHING SUFFIXES WITH MEANINGS**

Match the suffix in Column 1 with its definition in Column 2.

COLUMN 1	COLUMN 2
1. _____ -cyte	A. morbid impulse toward a specific object or thought
2. _____ -edema	B. vomiting
3. _____ -emesis	C. a stone, calculus, calcification
4. _____ -sclerosis	D. a condition, a process or state of
5. _____ -tome	E. disease
6. _____ -ism	F. visual examination
7. _____ -lith	G. cell
8. _____ -lysis	H. disintegration
9. _____ -opsy	I. excessive fluid in intracellular tissues
10. _____ -pathy	J. instrument for cutting
11. _____ -phobia	K. level, unchanging
12. _____ -poiesis	L. a narrowing
13. _____ -stomy	M. hardness
14. _____ -stasis	N. permanent opening
15. _____ -stenosis	O. producing

EXERCISE 2-10**FILL IN THE BLANK**

For each of the following questions or statements, write the answer in the space provided.

- What two suffixes mean “pain?” _____
- Ang/i/o* is a root meaning “blood vessel.” What term means “dilation of a blood vessel?”

- Angioid means “resembling blood vessels.” What part of speech is angioid? _____
- Define angiorrhaphy _____
- What suffix would you add to the root *ang/i/o* to form a term meaning “the act of making a pictorial record of blood vessels?” _____

6. What is an angioma? _____
7. What does *-plasty* mean? _____
8. What term denotes a skin specialist? _____
9. Does a gerontologist treat young or old patients? _____
10. What is the difference in meaning between *gerontology* and *geriatrics*? _____
11. The prefixes *ab-* and *ad-* are opposites; which one means “toward?” _____
12. The prefix *pre-* means “before”; what other prefix means the same thing? _____
13. Write a brief definition of bradycardia _____
14. What does the prefix *extra-* mean in the word extrasensory? _____
15. What prefix would you use in a term that means “high blood pressure?” _____
16. Given the meaning of *anti-*, what would be the purpose of an anticoagulant?

17. Given the meaning of the prefix *tri-*, how many cusps does the tricuspid valve have?

18. What does the prefix *micro-* tell us about the purpose of a microscope? _____
19. Write a medical term by combining the prefix *endo-* with the root *card/i/o*, meaning “heart,” and the suffix that means “inflammation.” Using only your knowledge of these three word parts, write the best definition you can for the term _____.
20. The suffix *-pnea*, meaning “breathing” or “respiration,” can follow both *tachy-* and *dys-*. Define the terms tachypnea and dyspnea _____