

Suffixes

CHAPTER

2

Chapter Outline

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Suffix Types

Surgical, Diagnostic, Pathological, and Related Suffixes

Grammatical Suffixes

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Objectives

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

- Define and provide examples of surgical, diagnostic, pathological, and related suffixes.
- Determine how to link combining forms and word roots to various types of suffixes.
- Identify adjective, noun, and diminutive suffixes.
- Locate and apply guidelines for pluralizing terms.
- Pronounce medical terms presented in this chapter.
- Demonstrate your knowledge of the chapter by completing the learning activities.

Suffix Linking

In medical words, a suffix is added to the end of a word root or combining form to change its meaning. For example, the combining form *gastr/o* means *stomach*. The suffix *-megaly* means *enlargement*, and *-itis* means *inflammation*. *Gastr/o/megaly* is an enlargement of the stomach; *gastr/itis* is an inflammation of the stomach. Whenever you change the suffix, you change the meaning of the word. Suffixes are also used to denote singular and plural forms of a word as well as a part of speech. The following tables provide additional examples to reinforce the rules you learned in Chapter 1. (See Tables 2-1 and 2-2.)

Words that contain more than one word root are known as compound words. Multiple word roots within a compound word are always changed to combining forms so that the roots are joined together with a combining vowel, regardless of whether the second word root begins with a vowel or a consonant. Notice that a combining vowel is used in the Table 2-2 between *gastr* and *enter*, even though the second word root, *enter*, begins with a vowel.

Keep in mind the rule for linking multiple roots is slightly different from the rules for linking word roots to suffixes. Recall from Chapter 1 that suffixes that begin with a vowel are linked with a word root; suffixes that begin with a consonant are linked with a combining form.

Table 2-1 Word Roots and Combining Forms with Suffixes					
<i>This table provides examples of word roots used to link a suffix that begins with a vowel. It also lists combining forms (root + o) used to link a suffix that begins with a consonant.</i>					
Element	+	Suffix	=	Medical Word	Meaning
Word Roots					
gastr (stomach)	+	-itis (inflammation)	=	gastritis gās-TRĪ-tīs	inflammation of the stomach
hemat (blood)	+	-emesis (vomiting)	=	hematemesis hēm-āt-ĔM-ĕ-sīs	vomiting of blood
arthr (joint)	+	-itis (inflammation)	=	arthritis ār-THRĪ-tīs	inflammation of a joint
Combining Forms					
gastr/o (stomach)	+	-dynia (pain)	=	gastrodynia gās-trō-DĪN-ē-ā	pain in the stomach
hemat/o (blood)	+	-logy (study of)	=	hematology hē-mā-TŌL-ō-jē	study of blood
arthr/o (joint)	+	-centesis (surgical puncture)	=	arthrocentesis ār-thrō-sĕn-TĒ-sīs	surgical puncture of a joint

Table 2-2 Compound Words with Suffixes							
<i>This table shows examples of medical terms with more than one word root, and also suffixes linked together with word roots when the suffix begins with a vowel.</i>							
Combining Form	+	Word Root	+	Suffix	=	Medical Word	Meaning
gastr/o (stomach)	+	enter (intestine)	+	-itis (inflammation)	=	gastroenteritis gās-trō-ĕn-tĕr-Ī-tīs	inflammation of stomach and intestine
oste/o (bone)	+	arthr (joint)	+	-itis (inflammation)	=	osteoarthritis ōs-tĕ-ō-ār-THRĪ-tīs	inflammation of bone and joint
encephal/o (brain)	+	mening (meninges)	+	-itis (inflammation)	=	encephal meningitis ĕn-sĕf-ā-lō-mĕn-ĭn-JĪ-tīs	inflammation of brain and meninges

Surgical, Diagnostic, Pathological, and Related Suffixes

Surgical suffixes describe a type of invasive procedure performed on a body part. (See Table 2–3.) Diagnostic suffixes denote a procedure or test performed to identify the cause and nature of an illness. Pathological suffixes

describe an abnormal condition or disease. (See Table 2–4.)

Suffix Types

An effective method in mastering medical terminology is to learn the major types of suffixes in categories. By grouping the surgical, diagnostic, pathological, related, as well as grammatical suffixes, they will be easier to remember.

Table 2-3 Common Surgical Suffixes

This table lists commonly used surgical suffixes along with their meanings and word analyses.

Suffix	Meaning	Word Analysis
-centesis	surgical puncture	arthr/o/ centesis (ār-thrō-sĕn-TĒ-sĭs): puncture of a joint space with a needle and the withdrawal of fluid <i>arthr/o:</i> joint <i>Arthrocentesis may also be performed to obtain samples of synovial fluid for diagnostic purposes, instill medications, and remove fluid from joints to relieve pain.</i>
-clasis	to break; surgical fracture	oste/o/ clasis (ōs-tē-ŌK-lās-sĭs): surgical fracture of a bone to correct a deformity <i>oste/o:</i> bone
-desis	binding, fixation (of a bone or joint)	arthr/o/ desis (ār-thrō-DĒ-sĭs): binding together of a joint <i>arthr/o:</i> joint <i>Arthrodesis is a surgical procedure to fuse bones across the joint space in a degenerated, unstable joint.</i>
-ectomy	excision, removal	append/ ectomy (ăp-ĕn-DĒK-tō-mĕ): excision of the appendix <i>append:</i> appendix
-lysis	separation; destruction; loosening	thromb/o/ lysis (thrŏm-BŎL-ĭ-sĭs): destruction of a blood clot <i>thromb/o:</i> blood clot <i>Drug therapy is usually used to dissolve a blood clot.</i>
-pexy	fixation (of an organ)	mast/o/ pexy (MĀS-tō-pĕks-ĕ): fixation of the breast(s) <i>mast/o:</i> breast <i>Mastopexy, an elective surgery, is performed to affix sagging breasts in a more elevated position, commonly improving their shape.</i>
-plasty	surgical repair	rhin/o/ plasty (Rĭ-nŏ-plās-tĕ): surgical repair of the nose <i>rhin/o:</i> nose <i>Plastic surgery to change the size or shape of the nose.</i>
-rrhaphy	suture	my/o/ rrhaphy (mĭ-OR-ă-fĕ): suture of a muscle <i>my/o:</i> muscle
-stomy	forming an opening (mouth)	trache/o/ stomy (trā-kĕ-ŌS-tō-mĕ): forming an opening into the trachea <i>trache/o:</i> trachea (windpipe) <i>A tracheostomy is an artificial opening performed to bypass an obstructed upper airway.</i>

(continued)

Table 2-3 Surgical Suffixes—cont'd		
-tome	instrument to cut	oste/o/ tome (ŌS-tē-ō-tōm): instrument to cut bone <i>oste/o</i> : bone <i>An osteotome is a surgical chisel used to cut through bone.</i>
-tomy	incision	trache/o/ tomy (trā-kē-ŌT-ō-mē): incision (through the neck) into the trachea <i>trache/o</i> : trachea (windpipe) <i>Tracheotomy is performed to gain access to an airway below a blockage.</i>
-tripsy	crushing	lith/o/ tripsy (LĪTH-ō-trĭp-sē): crushing a stone <i>lith/o</i> : stone, calculus <i>Lithotripsy is a surgical procedure for eliminating a stone in the kidney, ureter, bladder, or gallbladder.</i>



It is time to review surgical suffixes by completing Learning Activities 2-1, 2-2, and 2-3.

Table 2-4 Diagnostic, Pathological, and Related Suffixes		
<i>This table lists commonly used diagnostic, pathological, and related suffixes along with their meanings and word analyses.</i>		
Suffix	Meaning	Word Analysis
Diagnostic		
-gram	record, writing	electr/o/cardi/o/ gram (ē-lĕk-trō-KĀR-dē-ō-grām): record of the electrical activity of the heart <i>electr/o</i> : electricity <i>cardi/o</i> : heart
-graph	instrument for recording	cardi/o/ graph (KĀR-dē-ō-grāf): instrument for recording electrical activity of the heart <i>cardi/o</i> : heart
-graphy	process of recording	angi/o/ graphy (ān-jē-ŌG-rā-fē): process of recording blood vessels <i>angi/o</i> : vessel (usually blood or lymph) <i>Angiography is the radiographic imaging of blood vessels after injection of a contrast medium.</i>
-meter	instrument for measuring	pelv/i/ meter * (pĕl-VĪM-ĕ-tĕr): instrument for measuring the pelvis <i>pelv/i</i> : pelvis
-metry	act of measuring	pelv/i/ metry * (pĕl-VĪM-ĕ-trē): act or process of measuring the dimension of the pelvis <i>pelv/i</i> : pelvis
-scope	instrument for examining	endo/ scope (ĒN-dō-skōp): instrument for examining within <i>endo-</i> : in, within <i>An endoscope is a flexible or rigid instrument consisting of a tube and optical system for observing the inside of a hollow organ or cavity.</i>
-scopy	visual examination	endo/ scopy (ĕn-DŌS-kō-pē): visual examination within <i>endo-</i> : in, within <i>Endoscopy is performed to visualize a body cavity or canal using a specialized lighted instrument called an endoscope.</i>

Table 2-4 Diagnostic, Pathological, and Related Suffixes—cont'd

Suffix	Meaning	Word Analysis
Pathological and Related		
-algia	pain	neur/ algia (nū-RĀL-jē-ă): pain of a nerve <i>neur</i> : nerve The pain of neuralgia usually occurs along the path of a nerve.
-dynia		ot/o/ dynia (ō-tō-DĪN-ē-ă): pain in the ear; earache <i>ot/o</i> : ear
-cele	hernia, swelling	hepat/o/ cele (hē-PĀT-ō-sēl): hernia of the liver <i>hepat/o</i> : liver
-ectasis	dilation, expansion	bronchi/ ectasis (brōng-kē-ĒK-tă-sīs): dilation or expansion of one or more bronchi <i>bronchi</i> : bronchus (plural, bronchi) Bronchiectasis is associated with various lung conditions and is commonly accompanied by chronic infection.
-edema	swelling	lymph/ edema (lĭmf-ē-DE-mă): swelling and accumulation of tissue fluid <i>lymph</i> : lymph Lymphedema may be caused by a blockage of the lymph vessels.
-emesis	vomiting	hyper/ emesis (hī-pēr-ĒM-ē-sīs): excessive vomiting <i>hyper-</i> : excessive, above normal
-emia	blood condition	an/ emia (ă-NE-mē-ă): blood condition caused by a decrease in red blood cells (erythrocytes) <i>an-</i> : without, not
-gen	forming, producing, origin	carcin/o/ gen (kăr-SĪN-ō-jēn): forming, producing, or origin of cancer <i>carcin/o</i> : cancer A carcinogen is a substance or agent, such as cigarettes, that causes the development or increases the incidence of cancer.
-genesis		carcin/o/ genesis (kăr-sī-nō-JĒN-ē-sīs): forming or producing cancer <i>carcin/o</i> : cancer Carcinogenesis is the transformation of normal cells into cancer cells, commonly as a result of chemical, viral, or radioactive damage to genes.
-iasis	abnormal condition (produced by something specific)	chol/e/lith/ iasis * (kō-lē-lĭ-THĪ-ă-sīs): abnormal condition of gallstones <i>chol/e</i> : bile, gall <i>lith</i> : stone, calculus Cholelithiasis is the presence or formation of gallstones in the gallbladder or common bile duct.
-itis	inflammation	gastr/ itis (găs-TRĪ-tīs): inflammation of the stomach <i>gastr</i> : stomach
-lith	stone, calculus	chol/e/ lith * (KŌ-lē-lĭth): gallstone <i>chol/e</i> : bile, gall
-malacia	softening	chondr/o/ malacia (kōn-drō-māl-Ā-shē-ă): softening of the articular cartilage, usually involving the patella <i>chondr/o</i> : cartilage

(continued)

Table 2-4 Diagnostic, Pathological, and Related Suffixes—cont'd		
Suffix	Meaning	Word Analysis
-megaly	enlargement	cardi/o/ megaly (kār-dē-ō-MĔG-ā-lē): enlargement of the heart <i>cardi/o</i> : heart
-oma	tumor	neur/ oma (nū-RŌ-mă): tumor composed of nerve tissue <i>neur</i> : nerve <i>A neuroma is a benign tumor composed chiefly of neurons and nerve fibers, usually arising from a nerve tissue. It may also be a swelling of a nerve that usually results from compression.</i>
-osis	abnormal condition; increase (used primarily with blood cells)	cyan/ osis (sī -ā-NŌ-sīs): dark blue or purple discoloration of the skin and mucous membrane <i>cyan</i> : blue <i>Cyanosis indicates a deficiency of oxygen in the blood.</i>
-pathy	disease	my/o/ pathy (mī-ŌP-ā-thē): disease of muscle <i>my/o</i> : muscle
-penia	decrease, deficiency	erythr/o/ penia (ē-rīth-rō-PĒ-nē-ā): decrease in red blood cells <i>erythr/o</i> : red
-phagia	eating, swallowing	dys/ phagia (dīs-FĀ -jē-ā): inability or difficulty in swallowing <i>dys-</i> : bad; painful; difficult
-phasia	speech	a/ phasia (ā-FĀ -zē-ā): absence or impairment of speech <i>a-</i> : without, not
-phobia	fear	hem/o/ phobia (hē-mō-FŌ-bē-ā): fear of blood <i>hem/o</i> : blood
-plasia	formation, growth	dys/ plasia (dīs-PLĀ -zē-ā): abnormal formation or growth of cells, tissues, or organs <i>dys-</i> : bad; painful; difficult <i>Dysplasia is a general term for abnormal formation of an anatomic structure.</i>
-plasm		neo/ plasm (NĒ-ō-plāzm): new formation or growth of tissue <i>neo-</i> : new <i>A neoplasm is an abnormal formation of new tissue, such as a tumor or growth.</i>
-plegia	paralysis	hemi/ plegia (hēm-ē-PLĒ -jē-ā): paralysis of one side of the body <i>hemi-</i> : one half <i>Hemiplegia affects the right or left side of the body and is usually caused by a brain injury or stroke.</i>
-ptosis	prolapse, downward displacement	blephar/o/ ptosis (blēf-ā-rō-TŌ-sīs): drooping of the upper eyelid <i>blephar/o</i> : eyelid
-rrhage	bursting forth (of)	hem/o/ rrhage (HĔM-ē-rīj): bursting forth (of) blood <i>hem/o</i> : blood <i>Hemorrhage refers to a loss of a large amount of blood within a short period, either externally or internally.</i>
-rrhagia		men/o/ rrhagia (mēn-ō-RĀ-jē-ā): profuse discharge of blood during menstruation <i>men/o</i> : menses, menstruation

Table 2-4 Diagnostic, Pathological, and Related Suffixes—cont'd

Suffix	Meaning	Word Analysis
-rrhea	discharge, flow	dia/ rrhea (dī-ă-RĒ-ă): abnormally frequent discharge or flow of fluid fecal matter from the bowel <i>dia-</i> : through, across
-rrhexis	rupture	arteri/o/ rrhexis (ă-r-tē-rē-ō-RĒK-sīs): rupture of an artery <i>arteri/o</i> : artery
-sclerosis	abnormal condition of hardening	arteri/o/ sclerosis (ă-r-tē-rē-ō-sklē-RŌ-sīs): abnormal condition of hardening of an artery <i>arteri/o</i> : artery
-spasm	involuntary contraction, twitching	blephar/o/ spasm (BLĒF-ă-rō-spăsm): twitching of the eyelid <i>blephar/o</i> : eyelid
-stenosis	narrowing, stricture	arteri/o/ stenosis (ă-r-tē-rē-ō-stĕ-NŌ-sīs): abnormal narrowing of an artery <i>arteri/o</i> : artery
-toxic	poison	hepat/o/ toxic (HĒP-ă-tō-tŏk-sĭk): poisonous to the liver <i>hepat/o</i> : liver
-trophy	nourishment, development	dys/ trophy (DĪS-trŏ-fĕ): bad nourishment <i>dys-</i> : bad; painful; difficult <i>Dystrophy is an abnormal condition caused by improper nutrition or altered metabolism.</i>

*The *i* in *pelvimeter* and *pelvimetry* and the *e* in *chollelithiasis* and *chollelith* are exceptions to the rule of using the connecting vowel *o*.



It is time to review diagnostic, pathological, and related suffixes by completing Learning Activities 2–4 and 2–5.

Grammatical Suffixes

Grammatical suffixes are attached to word roots to form parts of speech, such as adjectives and nouns, or singular or plural forms of medical words. They

are also used to denote a diminutive form, or smaller version, of a word—for example, *tubule*, which means a small tube. Many of these same suffixes are used in the English language. (See Table 2–5.)

Table 2-5 Adjective, Noun, and Diminutive Suffixes

Suffix	Meaning	Word Analysis
<i>This table lists adjective, noun, and diminutive suffixes along with their meanings and word analyses.</i>		
Adjective		
-ac	pertaining to	cardi/ ac (KĂR-dē-ăk): pertaining to the heart <i>cardi</i> : heart
-al		neur/ al (NŪ-răl): pertaining to a nerve <i>neur</i> : nerve
-ar		muscul/ ar (MŪS-kŭ-lăr): pertaining to muscle <i>muscul</i> : muscle

(continued)

Table 2-5 Adjective, Noun, and Diminutive Suffixes—cont'd

Suffix	Meaning	Word Analysis
-ary		pulmon/ ary (PŪL-mō-nĕr-ē): pertaining to the lungs <i>pulmon</i> : lung
-eal		esophag/ eal (ē-sŏf-ă-JĒ-ăl): pertaining to the esophagus <i>esophag</i> : esophagus
-ic		thorac/ ic (thō-RĀS-ĭk): pertaining to the chest <i>thorac</i> : chest
-ical*		path/o/log/ ical (păth-ō-LŎJ-ĭ-kăl): pertaining to the study of disease <i>path/o</i> : disease <i>log</i> : study of
-ile		pen/ ile (PĒ-nĭl): pertaining to the penis <i>pen</i> : penis
-ior		poster/ ior (pŏs-TĒ-rĕ-or): pertaining to the back of the body <i>poster</i> : back (of body), behind, posterior
-ous**		cutane/ ous (kŭ-TĀ-nĕ-ŭs): pertaining to the skin <i>cutane</i> : skin
-tic		acous/ tic (ă-KOOS-tĭk): pertaining to hearing <i>acous</i> : hearing
Noun		
-esis	condition	di/ur/ esis (dĭ-ŭ-RĒ-sĭs): abnormal secretion of large amounts of urine <i>di-</i> : double <i>ur</i> : urine
-ia		pneumon/ ia (nŭ-MŎ-nĕ-ă): infection of the lung usually caused by bacteria, viruses, or diseases <i>pneumon</i> : air; lung
-ism		hyper/thyroid/ ism (hĭ-pĕr-THĪ-royd-ĭzm): condition characterized by overactivity of the thyroid gland <i>hyper-</i> : excessive, above normal <i>thyroid</i> : thyroid gland
-iatry	medicine; treatment	pod/ iatry (pŏ-Dĭ-ă-trĕ): specialty concerned with treatment and prevention of conditions of the feet <i>pod</i> : foot
-ician	specialist	obstetr/ ician (ŏb-stĕ-TRĭSH-ăn): physician who specializes in the branch of medicine concerned with pregnancy and childbirth <i>obstetr</i> : midwife
-ist		hemat/o/log/ ist (hĕ-mă-TŎL-ŏ-jĭst): physician who specializes in the treatment of disorders of blood and blood-forming tissues <i>hemat/o</i> : blood <i>log</i> : study of
-y	condition; process	neur/o/path/ y (nŭ-RŎP-ă-thĕ): disease condition of the nerves <i>neur/o</i> : nerve <i>path</i> : disease

Table 2-5 Adjective, Noun, and Diminutive Suffixes—cont'd

Suffix	Meaning	Word Analysis
Diminutive		
-icle	small, minute	ventr/ icle (VĔN-trĭ-kl): small cavity, as of the brain or heart <i>ventr</i> : belly, belly side
-ole		arteri/ ole (ăr-TĔ-rĕ-ōl): the smallest of the arteries; minute artery <i>arteri</i> : artery Arteries narrow to form arterioles (small arteries), which branch into capillaries (the smallest blood vessels).
-ule		ven/ ule (VĔN-ūl): small vein continuous with a capillary <i>ven</i> : vein


*The suffix *-ical* is a combination of *-ic* and *-al*. **The suffix *-ous* also means *composed of* or *producing*.

 It is time to review grammatical suffixes by completing Learning Activity 2–6.

Plural Suffixes

Many medical words have Greek or Latin origins and follow the rules of these languages in building singular and plural forms. Once you learn these rules, you will find that they are easy to apply. You will also find that some English endings have also been adopted for com-

monly used medical terms. When a word changes from a singular to a plural form, the suffix of the word is the part that changes. A summary of the rules for changing a singular word into its plural form is located on the inside back cover of this textbook. Use it to complete Learning Activity 2–7 and whenever you need help forming plural words.

 It is time to review the rules for forming plural words by completing Learning Activity 2–7.

LEARNING ACTIVITIES

The following activities provide review of the suffixes introduced in this chapter. Complete each activity and review your answers to evaluate your understanding of the chapter.

Learning Activity 2-1

Building Surgical Words

Use the meanings in the right column to complete the surgical words in the left column. The first one is completed for you. Note: The word roots are underlined in the left column.

Incomplete Word

Meaning

1. <u>episi</u> /o/t <u>o m y</u> _____	incision of the perineum
2. <u>col</u> _____	excision (of all or part)* of the colon
3. <u>arthr</u> /o/ _____	surgical puncture of a joint (to remove fluid)
4. <u>splen</u> _____	excision of the spleen
5. <u>col</u> /o/ _____	forming an opening (mouth) into the colon
6. <u>oste</u> /o/ _____	instrument to cut bone
7. <u>tympan</u> /o/ _____	incision of the tympanic membrane
8. <u>trache</u> /o/ _____	forming an opening (mouth) into the trachea
9. <u>mast</u> _____	excision of a breast
10. <u>lith</u> /o/ _____	incision to remove a stone or calculus
11. <u>hemorrhoid</u> _____	excision of hemorrhoids

Build a surgical word that means

12. forming an opening (mouth) into the colon: _____
13. excision of the colon: _____
14. instrument to cut bone: _____
15. surgical puncture of a joint: _____
16. incision to remove a stone: _____
17. excision of a breast: _____
18. incision of the tympanic membrane: _____
19. forming an opening (mouth) into the trachea: _____
20. excision of the spleen: _____



Check your answers in Appendix A. Review any material that you did not answer correctly.

Correct Answers _____ $\times 5 =$ _____ % Score

*Information in parentheses is used to clarify the meaning of the word but not to build the medical term.

Note: If you are not satisfied with your level of comprehension in Learning Activity 2-1, review it and complete the exercise again.

Learning Activity 2-2

Building More Surgical Words

Use the meanings in the right column to complete the surgical words in the left column. The word roots are underlined in the left column.

Incomplete Word	Meaning
1. arthr/o/	fixation or binding of a joint
2. rhin/o/	surgical repair of the nose
3. ten/o/	surgical repair of tendons
4. my/o/	suture of a muscle
5. mast/o/	fixation of a (pendulous)* breast
6. cyst/o/	suture of the bladder
7. oste/o/	surgical fracture of a bone
8. lith/o/	crushing of a stone
9. enter/o/	separation of intestinal (adhesions)
10. neur/o/	crushing a nerve

Build a surgical word that means

11. surgical repair of the nose: _____
12. fixation of a joint: _____
13. suture of a muscle: _____
14. fixation of a (pendulous) breast: _____
15. suture of the bladder: _____
16. repair of tendons: _____
17. surgical fracture of a bone: _____
18. crushing stones: _____
19. separation of intestinal (adhesions): _____
20. crushing a nerve: _____



Check your answers in Appendix A. Review any material that you did not answer correctly.

Correct Answers _____ $\times 5 =$ _____ % Score

*Information in parentheses is used to clarify the meaning of the word but not to build the medical term.

Learning Activity 2-3

Selecting a Surgical Suffix

Use the suffixes listed below to build surgical words in the right column that reflect the meanings in the left column.

-centesis

-ectomy

-plasty

-tome

-clasis

-lysis

-rrhaphy

-tomy

-desis

-pexy

-stomy

-tripsy

1. crushing of a stone:	lith/o/ _____
2. puncture of a joint (to remove fluid)*:	arthr/o/ _____
3. excision of the spleen:	splen/ _____
4. forming an opening (mouth) into the colon:	col/o/ _____
5. instrument to cut skin:	derma/ _____
6. forming an opening (mouth) into the trachea:	trache/o/ _____
7. incision to remove a stone or calculus:	lith/ _____ / _____
8. excision of a breast:	mast/ _____
9. excision of hemorrhoids:	hemorrhoid/ _____
10. incision of the trachea:	trache/ _____ / _____
11. fixation of a breast:	mast/ _____ / _____
12. excision of the colon:	col/ _____
13. suture of the stomach (wall):	gastr/ _____ / _____
14. fixation of the uterus:	hyster/ _____ / _____
15. surgical repair of the nose:	rhin/ _____ / _____
16. fixation or binding of a joint:	arthr/ _____ / _____
17. to break or surgically fracture a bone:	oste/ _____ / _____
18. loosening of nerve (tissue):	neur/ _____ / _____
19. suture of muscle:	my/o/ _____
20. incision of the tympanic membrane:	tympan/ _____ / _____

 Check your answers in Appendix A. Review any material that you did not answer correctly.

Correct Answers _____ × 5 = _____ % Score

*Information in parentheses is used to clarify the meaning of the word but not to build the medical term.

Learning Activity 2-4

Selecting Diagnostic, Pathological, and Related Suffixes

Use the suffixes in this list to build diagnostic, pathological, and related words in the right column that reflect the meanings in the left column.

-algia	-graph	-metry	-penia	-rrhage
-cele	-iasis	-oma	-phagia	-rrhea
-ectasis	-malacia	-osis	-phasia	-rrhexis
-emia	-megaly	-pathy	-plegia	-spasm
-genesis				

1. tumor of the liver:	hepat/ _____
2. pain (along the course) of a nerve:	neur/ _____
3. dilation of a bronchus:	bronchi/ _____
4. producing or forming cancer:	carcin/o/ _____
5. abnormal condition of the skin:	dermat/ _____
6. enlargement of the kidney:	nephr/o/ _____
7. discharge or flow from the ear:	ot/ _____ / _____
8. rupture of the uterus:	hyster/ _____ / _____
9. spasm or twitching of the eyelid:	blephar/ _____ / _____
10. herniation of the bladder:	cyst/ _____ / _____
11. bursting forth (of) blood:	hem/o/ _____
12. abnormal condition of a stone or calculus:	lith/ _____
13. paralysis affecting one side (of the body):	hemi/ _____
14. disease of muscle (tissue):	my/ _____ / _____
15. difficult or painful swallowing or eating:	dys/ _____
16. softening of the bones:	oste/ _____ / _____
17. without (or absence of) speech:	a/ _____
18. white blood condition:	leuk/ _____
19. deficiency in red (blood) cells:	erythr/ _____ / _____
20. measuring the pelvis:	pelv/i/ _____



Check your answers in Appendix A. Review any material that you did not answer correctly.

Correct Answers _____ × 5 = _____ % Score

Learning Activity 2-5

Building Pathological and Related Words

Use the meanings in the right column to complete the pathological and related words in the left column.

Incomplete Word	Meaning
1. bronchi _____	dilation of a bronchus
2. chole _____	gallstone
3. carcin/o/ _____	forming or producing cancer
4. oste/ __ / _____	softening of bone
5. hepat/ __ / _____	enlargement of the liver
6. cholelith _____	abnormal condition of gallstones
7. hepat/ __ / _____	herniation of the liver
8. neur/o/ _____	disease of the nerves
9. dermat _____	abnormal condition of the skin
10. hemi _____	paralysis of one half of the body
11. dys _____	difficult swallowing
12. a _____	without (or absence of) speech
13. cephal _____	pain in the head; headache
14. blephar/ __ / _____	twitching of the eyelid
15. hyper _____	excessive formation (of an organ or tissue)



Check your answers in Appendix A. Review any material that you did not answer correctly.

Correct Answers _____ $\times 6.67 =$ _____ % Score

Learning Activity 2-6

Selecting Adjective, Noun, and Diminutive Suffixes

Use the adjective suffixes in the following list to create a medical term. The first one is completed for you. Note: When in doubt about the validity of a word, refer to a medical dictionary.

-ac

-ary

-ic

-tic

-al

-eal

-ous

-tix

Element	Medical Term	Meaning
1. thorac/	<u>thoracic</u>	pertaining to the chest
2. gastr/	_____	pertaining to the stomach
3. bacteri/	_____	pertaining to bacteria
4. aqua/	_____	pertaining to water
5. axill/	_____	pertaining to the armpit
6. cardi/	_____	pertaining to the heart
7. spin/	_____	pertaining to the spine
8. membran/	_____	pertaining to a membrane

Use the noun suffixes in the following list to create a medical term.

-er

-ism

-iatry

-ia

-ist

-is

-y

Element	Medical Term	Meaning
9. intern/	_____	specialist in internal medicine
10. leuk/em/	_____	condition of "white" blood
11. sigmoid/o/scop/	_____	visual examination of the sigmoid colon
12. alcohol/	_____	condition of (excessive) alcohol
13. pod/	_____	treatment of the feet
14. allerg/	_____	specialist in treating allergic disorders
15. man/	_____	condition of madness

Use the diminutive suffixes in the following list to create a medical term.

-icle

-ole

-ula

-ule

Element	Medical Term	Meaning
16. arteri/	_____	minute artery
17. ventr/	_____	small cavity
18. ven/	_____	small vein



Check your answers in Appendix A. Review any material that you did not answer correctly.


Correct Answers _____ × 5.6 = _____ % Score

Learning Activity 2-7

Forming Plural Words

Review the guidelines for plural suffixes (located inside the back cover of this book). Then write the plural form for each of the following singular terms and briefly state the rule that applies. The first one is completed for you.

Singular	Plural	Rule
1. diagnosis	<i>diagnoses</i> _____	<i>Drop the is and add es.</i> _____
2. fornix	_____	_____
3. vertebra	_____	_____
4. keratosis	_____	_____
5. bronchus	_____	_____
6. spermatozoon	_____	_____
7. septum	_____	_____
8. coccus	_____	_____
9. ganglion	_____	_____
10. prognosis	_____	_____
11. thrombus	_____	_____
12. appendix	_____	_____
13. bacterium	_____	_____
14. testis	_____	_____
15. nevus	_____	_____

 Check your answers in Appendix A. Review any material that you did not answer correctly.

Correct Answers _____ × 6.67 = _____ % Score



Enhance your study and reinforcement of suffixes with the power of DavisPlus. Visit www.davisplus.fadavis.com/gyls/systems for the flash-card activity related to suffixes. We recommend you complete the flash-card activity before moving on to Chapter 3.