

Instructor's Manual – Chapter 1

Lesson Overview:

This chapter presents content that helps students build a foundation of medical terminology for the remaining chapters. The chapter will especially be of help to students who have little or no experience or background in healthcare.

Learning Outcomes:

- 1.1 Summarize the purpose of medical language.
- 1.2 Summarize the origins of medical language.
- 1.3 Summarize the principles of medical language.
- 1.4 Summarize how to pronounce terms associated with medical language.
- 1.5 Identify the parts used to build medical language.
- 1.6 Summarize how to put together medical terms.
- 1.7 Describe how medical terms are translated.

Lesson Outline:

Introduction

1.1 The Purpose of Medical Language

- a. Why is Medical Language Necessary?

1.2. The Origins of Medical Language

- a. Where Does It Come From?
- b. Why Greek and Latin?

1.3. The Principles of Medical Language

- a. How Does It Work?

1.4: How to Pronounce Terms Associated with Medical Language

- a. Syllable emphasis

1.5. Parts Used to Build Medical Language

- a. Common Roots
- b. Common Suffixes
- c. Singulars and plurals
- d. Common Prefixes

1.6. How to Put Together Medical Terms

- a. Putting It All Together
- b. Do Use a Combining Vowel
- c. Don't Use a Combining Vowel

1.7. How Medical Terms Are Translated

- a. Think of Medical Terms as Sentences

Additional materials/resources:

- a. Chapter 1 PowerPoint
- b. Chapter 1 SmartBook
- c. Record a screencast of yourself as you demonstrate how a few medical terms can be broken down into their word parts to translate the term's meaning.
- d. In-class small group discussion (or online discussion board): Have students discuss with each other an experience they had at a hospital or other healthcare facility, how they reacted to hearing unfamiliar medical terminology, and how they believe their future patients (regardless of the students' chosen health professions) feel during a medical encounter.
- e. Connect quiz to assess student learning of the origins of medical language, types of word parts, and plurals.
- f. Test utilizing various questions from the test bank

Teaching Tips:

Instructors should work slowly through the material and provide several examples to help students learn the various word parts and term-building guidelines. Instructors should also employ several real-world applications of the concepts and terms.

Answer keys:

Acquiring Medical Language Chapter 1 Answer Key

Learning Outcome 1.1 Exercise: The Purpose of Medical Language

Exercise 1

1. d
2. c
3. a
4. d

Learning Outcome: 01.1

Topic: The Purpose of Medical Language

Blooms: Remember

Difficulty: 1 Easy

Est Time: 0-1 minute

Learning Outcome 1.2 Exercise: The Origins of Medical Language

Exercise 1

1. T
2. T
3. T
4. F
5. T
6. T
7. T
8. F
9. T
10. F
11. T

Learning Outcome: 01.2

Topic: The Origins of Medical Language

Blooms: Remember

Difficulty: 1 Easy

Est Time: 0-1 minute

Learning Outcome 1.4 Exercises: How to Pronounce Terms Associated with Medical Language

Exercise 1

1. b
2. a

3. b
4. a
5. a
6. b
7. a
8. b
9. a
10. a
11. a
12. a
13. b
14. b
15. b
16. a
17. a
18. b
19. a
20. a
21. a
22. a
23. b
24. b

Learning Outcome: 01.4

Topic: How to Pronounce Terms Associated With Medical Language

Blooms: Apply

Difficulty: 2 Medium

Category: Pronunciation

Est Time: 0-1 minute

Exercise 2

1. **cholera**
2. **cornea**
3. **cuticle**
4. **catheter**
5. **collagen**
6. **anemia**
7. **oncology**
8. **optometry**
9. **rheumatoid**
10. **geneticist**
11. **dermatology**
12. **psychotherapist**

Learning Outcome: 01.4

Topic: How to Pronounce Terms Associated With Medical Language

Blooms: Understand

Difficulty: 2 Medium

Category: Pronunciation

Est Time: 0-1 minute

Learning Outcome 1.5 Exercises: Parts Used to Build Medical Language

Exercise 1

1. d
2. a
3. b
4. f
5. c
6. e

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 2

1. nerve
2. heart
3. joint
4. stomach
5. liver
6. small intestine

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 3

1. cardiology – heart
2. neurology – nerve
3. gastroscope – stomach
4. arthroscopy – joint
5. enterology – small intestine
6. hepatology – liver

Learning Outcome: 01.5
Topic: Parts Used to Build Medical Language
Blooms: Understand
Difficulty: 2 Medium
Category: Translation
Est Time: 0-1 minute

Exercise 4

1. cardi/o
2. arthr/o
3. neur/o
4. gastr/o
5. hepat/o
6. enter/o

Learning Outcome: 01.5
Topic: Parts Used to Build Medical Language
Blooms: Remember
Difficulty: 1 Easy
Category: Generation
Est Time: 0-1 minute

Exercise 5

1. d
2. e
3. e
4. b
5. b
6. c
7. c
8. c
9. d
10. b
11. a
12. a
13. e

Learning Outcome: 01.5
Topic: Parts Used to Build Medical Language
Blooms: Remember
Difficulty: 1 Easy
Category: Translation
Est Time: 0-1 minute

Exercise 6

1. muscle
2. skin
3. skin
4. vessel
5. vessel
6. lung
7. lung
8. lung
9. muscle
10. vessel
11. blood
12. blood
13. skin

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 7

1. **muscular** – muscle
2. **vascular** –vessel
3. **pulmon**ary – lung
4. **dermat**ology - skin
5. **hemat**ology – blood
6. **myo**spasm – muscle
7. **vaso**spasm –vessel
8. **angi**ogram –vessel
9. **dermo**pathy – skin
10. **hemo**static – blood
11. per**cutane**ous – skin
12. **vas**ectomy –vessel
13. **pneumo**nectomy – lung
14. **cardiomyo**pathy (2 roots) – heart, muscle
15. **cardiopulmon**ary (2 roots) – heart, lungs

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Understand

Difficulty: 2 Medium

Category: Translation
Est Time: 0-1 minute

Exercise 8

1. my/o; muscul/o
2. hem/o; hemat/o
3. derm/o; dermat/o; cutane/o
4. pneum/o; pneumat/o; pulmon/o
5. angi/o; vas/o; vascul/o

Learning Outcome: 01.5
Topic: Parts Used to Build Medical Language
Blooms: Remember
Difficulty: 1 Easy
Category: Generation
Est Time: 0-1 minute

Exercise 9

1. b
2. c
3. f
4. a
5. d
6. g
7. h
8. e

Learning Outcome: 01.5
Topic: Parts Used to Build Medical Language
Blooms: Remember
Difficulty: 1 Easy
Category: Translation
Est Time: 0-1 minute

Exercise 10

1. water
2. straight
3. death
4. fungus
5. pus
6. foreign
7. disease

8. hard
9. eat

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 11

1. **morph**ology – change
2. dys**plas**ia – formation
3. hypert**roph**ic – nourishment, development
4. teratog**enic** – creation, cause
5. **mycos**is – fungus
6. cranio**sten**osis – narrowing
7. **angioscler**osis (2 roots) –vessel, harden
8. **pyarthr**osis (2 roots) – pus, joint

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Understand

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 12

1. hydr/o
2. gen/o
3. py/o
4. orth/o
5. myc/o
6. path/o
7. scler/o
8. plas/o

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Generation

Est Time: 0-1 minute

Exercise 13

1. c
2. d
3. b
4. b
5. a
6. b

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 14

1. condition, procedure
2. condition
3. pertaining to
4. pertaining to
5. pertaining to
6. small

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 15

1. cardi / ac
2. gastr / ic
3. neuro / tic
4. skelet / al
5. esophag / eal
6. muscul / ar
7. pulmon / ary
8. cutane / ous
9. arteri / ole
10. pneumon / ia
11. cardio / vascul / ar

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Apply

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 16

1. cardiac – pertaining to
2. gastric – pertaining to
3. neurotic – pertaining to
4. skeletal – pertaining to
5. esophageal – pertaining to
6. muscular – pertaining to
7. pulmonary – pertaining to
8. cardiovascular – pertaining to
9. cutaneous – pertaining to
10. arteriole – small
11. ventricle – small
12. pustule – small
13. uvula – small
14. pneumonia – condition
15. autism – condition
16. pericardium – tissue, structure
17. hypertrophy – condition, process

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Understand

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 17

1. pertaining to the heart
2. pertaining to the stomach
3. pertaining to the nerves
4. pertaining to the skeleton
5. pertaining to the esophagus
6. pertaining to the muscles
7. pertaining to the lungs
8. pertaining to the skin
9. small artery

10. lung condition
11. pertaining to the heart and vessels

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Apply

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 18

1. -ium
2. -y
3. -ia, -ism, -y
4. -ole, -ule, -icle, -ula
5. -ac, -al, -ar, -ary, -eal, -ic, -tic, -ous

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 19

1. e
2. d
3. b
4. c
5. a
6. a

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 20

1. study of
2. specialist in the study of
3. specialist

4. specialist in the medicine of
5. medical science
6. medical science

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 21

1. cardio / logy
2. cardio / logist
3. patho / logy
4. patho / logist
5. psycho / logy
6. psycho / logist
7. dent / ist
8. psych / iatry
9. psych / iatrist
10. ped / iatrics

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Apply

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 22

1. cardio**logy** – study of
2. cardio**logist** – specialist in the study of
3. patho**logy** – study of
4. patho**logist** – specialist in the study of
5. psycho**logy** – study of
6. psycho**logist** – specialist in the study of
7. dent**ist** – specialist
8. psych**iatry** – medical science
9. psych**iatrist** – specialist in the medicine of
10. pedi**iatrics** – medical science

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language
Blooms: Understand
Difficulty: 2 Medium
Category: Translation
Est Time: 0-1 minute

Exercise 23

1. medical science of the mind
2. specialist in the medicine of the mind
3. study of the mind
4. specialist in the study of the mind

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language
Blooms: Understand
Difficulty: 2 Medium
Category: Translation
Est Time: 0-1 minute

Exercise 24

1. -ist
2. -logist
3. -logy
4. -iatrist
5. -iatry, -iatrics

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language
Blooms: Remember
Difficulty: 1 Easy
Category: Translation
Est Time: 0-1 minute

Exercise 25

1. g
2. f
3. d
4. a
5. c
6. e
7. b
8. h

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 26

1. involuntary contraction
2. enlargement
3. tumor
4. blood condition
5. inflammation
6. condition
7. disease
8. pain
9. pain
10. abnormal softening
11. excessive flow

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 27

1. myo / spasm
2. myo / pathy
3. cardio / megaly
4. gastr / itis
5. gastr / algia
6. gastro / dynia
7. gastro / malacia
8. hemat / oma
9. hemo / lysis
10. hemo / rrhage
11. sten / osis

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Apply

Difficulty: 2 Medium

Category: Translation
Est Time: 0-1 minute

Exercise 28

1. myospasm – involuntary contraction
2. myopathy – disease
3. cardiomegaly – enlargement
4. gastritis – inflammation
5. gastralgia – pain
6. gastrodynia – pain
7. gastromalacia – abnormal softening
8. hematoma – tumor
9. melanoma – tumor
10. hemolysis – loose, breakdown
11. hemorrhage – excessive flow
12. hydrocele – hernia
13. leukopenia – deficiency
14. stenosis – condition

Learning Outcome: 01.5
Topic: Parts Used to Build Medical Language
Blooms: Understand
Difficulty: 2 Medium
Category: Translation
Est Time: 0-1 minute

Exercise 29

1. involuntary contraction of the muscle
2. muscle disease
3. enlargement of the heart
4. inflammation of the stomach
5. stomach pain
6. stomach pain
7. abnormal softening of the stomach
8. blood tumor
9. blood breakdown
10. excessive flow of blood
11. narrowing condition

Learning Outcome: 01.5
Topic: Parts Used to Build Medical Language
Blooms: Apply
Difficulty: 2 Medium
Category: Translation

Est Time: 0-1 minute

Exercise 30

1. -oma
2. -oid
3. -emia
4. -iasis
5. -penia
6. -cele
7. -ptosis
8. -rrhea
9. -rrhexis

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 31

1. b
2. e
3. a
4. d
5. c
6. f
7. h
8. g

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 32

1. instrument used to measure
2. process of measuring
3. instrument used to look
4. process of looking
5. instrument used to produce a record

6. writing procedure
7. written record
8. puncture

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 33

1. audio / gram
2. audio / graph
3. audio / meter
4. gastro / scope
5. audio / graphy
6. audio / metry
7. gastro / scopy
8. ovario / centesis

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Apply

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 34

1. audiogram – written record
2. audiograph – instrument used to produce a record
3. audiometer – instrument used to measure
4. gastroscope – instrument used to look
5. audiography – writing procedure
6. audiometry – process of measuring
7. gastroscopy – process of looking
8. ovariocentesis – puncture

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Understand

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 35

1. written record of hearing
2. instrument used to produce a record of hearing
3. instrument used to measure hearing
4. instrument used to look in the stomach
5. writing procedure of hearing
6. process of measuring hearing
7. process of looking in the stomach
8. puncture of an ovary

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Apply

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 36

1. -scope
2. -scopy
3. -meter
4. -metry
5. -gram
6. -graph
7. -graphy
8. -centesis

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 37

1. d
2. c
3. e
4. b
5. f
6. a
7. g

Learning Outcome: 01.5
Topic: Parts Used to Build Medical Language
Blooms: Remember
Difficulty: 1 Easy
Category: Translation
Est Time: 0-1 minute

Exercise 38

1. reconstruction
2. incision
3. removal
4. creation of an opening
5. surgical fixation
6. binding
7. suture

Learning Outcome: 01.5
Topic: Parts Used to Build Medical Language
Blooms: Remember
Difficulty: 1 Easy
Category: Translation
Est Time: 0-1 minute

Exercise 39

1. myo / desis
2. myo / rrhaphy
3. gastro / pexy
4. myo / plasty
5. gastr / ectomy
6. tracheo / tomy
7. tracheo / stomy

Learning Outcome: 01.5
Topic: Parts Used to Build Medical Language
Blooms: Apply
Difficulty: 2 Medium
Category: Translation
Est Time: 0-1 minute

Exercise 40

1. myoplasty – reconstruction
2. tracheotomy – incision

3. tracheostomy – creation of an opening
4. gastrorectomy – removal
5. gastropexy – surgical fixation
6. myodesis – binding
7. myorrhaphy – suture

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Understand

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 41

1. reconstruction of a muscle
2. incision in the trachea
3. creation of an opening in the trachea
4. removal of the stomach
5. surgical fixation of the stomach
6. binding of a muscle
7. suture of a muscle

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Apply

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 42

1. -plasty
2. -ectomy
3. -tomy
4. -stomy
5. -pexy
6. -desis
7. -rrhaphy

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 43

1. b
2. f
3. f
4. h
5. d
6. c
7. a
8. a
9. g
10. e

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 44

1. plural
2. plural
3. singular
4. singular
5. singular
6. singular
7. plural
8. singular
9. singular
10. plural
11. plural
12. singular
13. singular
14. plural
15. singular
16. plural

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 45

- | | |
|--------------------------|----------|
| 1. append <u>ix</u> | singular |
| 2. append <u>ices</u> | plural |
| 3. cort <u>ex</u> | singular |
| 4. cort <u>ices</u> | plural |
| 5. thor <u>ax</u> | singular |
| 6. thor <u>aces</u> | plural |
| 7. myopath <u>y</u> | singular |
| 8. myopath <u>ies</u> | plural |
| 9. vertebra <u>a</u> | singular |
| 10. vertebrae <u>a</u> | plural |
| 11. ganglion <u>a</u> | singular |
| 12. ganglia <u>a</u> | plural |
| 13. carcinoma <u>a</u> | singular |
| 14. carcinomata <u>a</u> | plural |
| 15. ova <u>a</u> | plural |
| 16. ovum <u>a</u> | singular |
| 17. nucleu <u>s</u> | singular |
| 18. nucle <u>i</u> | plural |
| 19. diagnosi <u>s</u> | singular |
| 20. diagnos <u>es</u> | plural |
| 21. biopsy <u>y</u> | singular |
| 22. thrombu <u>s</u> | singular |
| 23. spermatozo <u>on</u> | singular |
| 24. larva <u>e</u> | plural |
| 25. sarcoma <u>a</u> | singular |
| 26. neuros <u>es</u> | plural |
| 27. bacteria <u>a</u> | plural |

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Understand

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 46

1. d
2. a
3. b
4. c
5. c
6. e

7. f
8. h
9. h
10. d
11. g
12. i

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 47

1. before
2. after
3. again
4. against
5. against
6. before, on behalf of
7. down, away from
8. not
9. not
10. before
11. fast
12. slow

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 48

1. brady / pnea
2. tachy / pnea
3. a / pnea
4. pre / nat / al
5. post / nat / al
6. anti / bio / tic
7. pro / bio / tic

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Apply

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 49

1. **prenatal** – before
2. **postnatal** – after
3. **antepartum** – before
4. **probiotic** – before, on behalf of
5. **antibiotic** – against
6. **contraceptive** – against
7. **dehydration** – down, away from
8. **rehabilitation** – again
9. **bradypnea** – slow
10. **tachypnea** – fast
11. **apnea** – not

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Understand

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 50

1. slow
2. fast
3. not
4. before
5. after
6. not
7. before
8. on behalf of
9. against

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Understand

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 51

1. re-
2. post-
3. brady-
4. tachy-
5. de-
6. pro-
7. pre-, ante-
8. a-, an-
9. contra-, anti-

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 52

1. a
2. b
3. c
4. d
5. e
6. f
7. f
8. g
9. g
10. h
11. i
12. j

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 53

1. beneath
2. between

3. around
4. through
5. away
6. towards
7. upon
8. out
9. outside
10. in, inside

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 54

1. ex / hale
2. ecto / derm
3. exo / skeleton
4. sub / cutane / ous
5. epi / card / ium
6. peri / card / ium
7. trans / derm / al
8. intra / derm / al
9. epi / derm / al
10. extra / vascul / ar
11. peri / card / itis

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Apply

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 55

1. **trans**dermal – through
2. **ex**hale – out
3. **extra**vascular – outside
4. **circum**cision – around
5. **peri**cardium – around
6. **peri**carditis – around
7. **sub**cutaneous – beneath

8. **ex**oskeleton – outside
9. **ecto**derm – outside
10. **ecto**pic – out
11. **inter**costal – between
12. **intra**venous – in, inside
13. **intra**dermal – in, inside
14. **epi**dermal – upon
15. **epi**cardium – upon
16. **endo**metrium – in, inside
17. **ab**duct – away
18. **e**voke – out
19. **di**uresis – through
20. **en**uresis – in

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Understand

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 56

1. outside skin
2. outside skeleton
3. pertaining to beneath the skin
4. tissue upon the heart
5. tissue around the heart
6. pertaining to through the skin
7. pertaining to inside the skin
8. pertaining to upon the skin
9. pertaining to outside a vessel
10. inflammation around the heart.

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Apply

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 57

1. sub-
2. inter-
3. epi-

4. ab-
5. ad-
6. peri-, circum-
7. trans-, dia-
8. en-, endo-, intra-
9. e-, ec-, ex-
10. ecto-, exo-, extra-

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 58

1. i
2. f
3. e
4. h
5. d
6. f
7. e
8. g
9. c
10. j
11. a
12. b

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 59

1. two
2. one
3. many
4. small
5. large
6. one
7. many

8. over
9. half
10. under
11. all
12. few

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 60

1. uni / sex
2. mono / cyte
3. olig / uria
4. poly / uria
5. hyper / pnea
6. hypo / pnea
7. macro / cephal / y
8. micro / cephal / y
9. pan / cyto / penia
10. hemi / nephro / ectomy

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Apply

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 61

1. **uni**lateral – one
2. **bi**lateral – two
3. **mono**cyte – one
4. **oligo**uria – few
5. **poly**uria – many
6. **poly**graph – many
7. **hyper**pnea – over
8. **hypo**pnea – under
9. **macro**cephaly – large
10. **micro**cephaly – small
11. **pan**cytopenia – all

12. **hemin**ephrectomy – half
13. **pan hyp**opituitarism (2 prefixes) – all, under

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Understand

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 62

1. one cell
2. few urine condition
3. much urine condition
4. over breathing
5. under breathing
6. instrument used to produce many records
7. condition of large head
8. condition of small head
9. all cell deficiency
10. half kidney removal

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Apply

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 63

1. macro-
2. micro-
3. hyper-
4. hypo-
5. bi-
6. pan-
7. oligo-
8. mono-, uni-
9. poly-, multi-
10. hemi-, semi-

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy
Category: Translation
Est Time: 0-1 minute

Exercise 64

1. c
2. c
3. c
4. a
5. b

Learning Outcome: 01.5
Topic: Parts Used to Build Medical Language
Blooms: Remember
Difficulty: 1 Easy
Category: Translation
Est Time: 0-1 minute

Exercise 65

1. with, together
2. with, together
3. with, together
4. bad
5. good

Learning Outcome: 01.5
Topic: Parts Used to Build Medical Language
Blooms: Remember
Difficulty: 1 Easy
Category: Translation
Est Time: 0-1 minute

Exercise 66

1. dys / pnea
2. eu / pnea
3. sym / metry
4. con / genit / al (3 parts)
5. syn / dactyl / y (3 parts)

Learning Outcome: 01.5
Topic: Parts Used to Build Medical Language
Blooms: Apply
Difficulty: 2 Medium

Category: Translation
Est Time: 0-1 minute

Exercise 67

1. congenital – with, together
2. congestion – with, together
3. dysuria – bad
4. dyspnea – bad
5. eupnea – good
6. euthyroid – good
7. syndrome – with, together
8. symmetry – with, together

Learning Outcome: 01.5
Topic: Parts Used to Build Medical Language
Blooms: Understand
Difficulty: 2 Medium
Category: Translation
Est Time: 0-1 minute

Exercise 68

1. bad breathing
2. good breathing
3. condition of together fingers
4. pertaining to with birth
5. process of measuring together

Learning Outcome: 01.5
Topic: Parts Used to Build Medical Language
Blooms: Apply
Difficulty: 2 Medium
Category: Translation
Est Time: 0-1 minute

Exercise 69

1. dys-
2. eu-
3. con-, syn-, sym-

Learning Outcome: 01.5
Topic: Parts Used to Build Medical Language
Blooms: Remember
Difficulty: 1 Easy

Category: Translation
Est Time: 0-1 minute

Learning Outcome 1.6 Exercises: How to Put Together Medical Terms

Exercise 1

1. carditis [No combining vowel]
2. cardiology
3. cardiomegaly
4. cardiomyopathy
5. cardiovascular
6. bradycardia [No combining vowel]
7. endocardium [No combining vowel]
8. pericardiocentesis

Learning Outcome: 01.6

Topic: How to Put Together Medical Terms

Blooms: Analyze

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 2

1. yes; suffix begins with consonant
2. yes; suffix begins with consonant
3. yes; suffix begins with consonant
4. yes; suffix begins with consonant
5. no; suffix begins with vowel
6. yes; suffix begins with consonant
7. no; suffix begins with vowel
8. no; suffix begins with vowel
9. yes; joining two roots together
10. yes; joining two roots together

Learning Outcome: 01.6

Topic: How to Put Together Medical Terms

Blooms: Analyze

Difficulty: 2 Medium

Category: Generation

Est Time: 0-1 minute

Exercise 3

1. cardiogram
2. gastroscope

3. cardiologist
4. cardiomegaly
5. gastric
6. gastrodynia
7. carditis
8. gastritis
9. cardiomyotomy
10. gastroesophageal

Learning Outcome: 01.6

Topic: How to Put Together Medical Terms

Blooms: Create

Difficulty: 3 Hard

Category: Generation

Est Time: 0-1 minute

Learning Outcome 1.7 Exercises: How Medical Terms Are Translated

Exercise 1

1. **cardiology** – heart
2. **arthritis** – joint
3. **carditis** – heart
4. **osteitis** – bone
5. **hepatitis** – liver
6. **arthralgia** – joint
7. **myalgia** – muscle
8. **ostealgia** – bone
9. **myotomy** – muscle
10. **osteotomy** – bone
11. **arthrectomy** – joint
12. **hepatectomy** – liver
13. **angiectomy** – vessel
14. **ostectomy** – bone
15. **myectomy** – muscle

Learning Outcome: 01.7

Topic: How Medical Terms Are Translated

Blooms: Understand

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 2

1. cardi**ology** – study of
2. arthri**itis** – inflammation

3. carditis – inflammation
4. osteitis – inflammation
5. hepatitis – inflammation
6. arthralgia – pain
7. myalgia – pain
8. ostealgia – pain
9. myotomy – incision
10. osteotomy – incision
11. arthrectomy – removal
12. hepatectomy – removal
13. angiectomy – removal
14. ostectomy – removal
15. myectomy – removal

Learning Outcome: 01.7

Topic: How Medical Terms Are Translated

Blooms: Understand

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 3

1. study of
2. inflammation
3. inflammation
4. inflammation
5. pain
6. pain
7. pain
8. incision
9. incision
10. removal
11. removal
12. removal
13. removal
14. removal

Learning Outcome: 01.7

Topic: How Medical Terms Are Translated

Blooms: Analyze

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 4

1. study of the heart
2. inflammation of the joints
3. inflammation of the heart
4. inflammation of the bone
5. inflammation of the liver
6. pain in the joints
7. pain in the muscles
8. pain in the bone
9. incision of a muscle
10. incision of a bone
11. removal of a joint
12. removal of the liver
13. removal of a vessel
14. removal of a bone
15. removal of a muscle

Learning Outcome: 01.7

Topic: How Medical Terms Are Translated

Blooms: Apply

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Acquiring Medical Language

Chapter 1: Online Content Answer Key

Exercise 1

1. specialist in the study of
2. inflammation
3. tumor
4. enlargement
5. written record
6. disease
7. removal
8. incision
9. abnormal hardening
10. abnormal softening

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy
Category: Translation
Est Time: 0-1 minute

Exercise 2

1. yes; suffix begins with a consonant
2. no; suffix begins with a vowel
3. no; suffix begins with a vowel
4. yes; suffix begins with a consonant
5. yes; suffix begins with a consonant
6. yes; suffix begins with a consonant
7. no; suffix begins with a vowel
8. yes; suffix begins with a consonant
9. yes; suffix begins with a consonant
10. yes; suffix begins with a consonant

Learning Outcome: 01.6
Topic: How to Put Together Medical Terms
Blooms: Analyze
Difficulty: 2 Medium
Category: Generation
Est Time: 0-1 minute

Exercise 3

1. nephrologist
2. nephritis
3. nephroma
4. nephromegaly
5. nephrogram
6. nephropathy
7. nephrectomy
8. nephrotomy
9. nephrosclerosis
10. nephromalacia

Learning Outcome: 01.6
Topic: How to Put Together Medical Terms
Blooms: Create
Difficulty: 3 Hard
Category: Generation
Est Time: 0-1 minute

Exercise 4

1. nephropathy
2. nephroma
3. nephritis
4. nephrologist
5. nephromegaly
6. nephrectomy
7. nephrotomy
8. nephrogram
9. nephromalacia
10. nephrosclerosis

Learning Outcome: 01.6

Topic: How to Put Together Medical Terms

Blooms: Create

Difficulty: 3 Hard

Category: Generation

Est Time: 0-1 minute

Exercise 5

1. inflammation
2. pertaining to
3. pertaining to
4. writing procedure
5. instrument for looking
6. tissue, structure
7. condition
8. reconstruction
9. disease
10. pain

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 6

1. over
2. under
3. before, on behalf of
4. bad
5. many
6. around

7. around
8. upon
9. in, inside
10. outside

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Remember

Difficulty: 1 Easy

Category: Translation

Est Time: 0-1 minute

Exercise 7

1. pericardium – heart
2. epicardium – heart
3. endocardium – heart
4. carditis – heart
5. pericarditis – heart
6. endocarditis – heart
7. angiosclerosis –vessel
8. myocardial – muscle; heart
9. myocarditis – muscle; heart
10. angiocarditis –vessel; heart
11. cardiopulmonary – heart; lung
12. cardiomyopathy – heart; muscle

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Understand

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 8

1. carditis– inflammation
2. pericarditis – inflammation
3. endocarditis – inflammation
4. myocarditis – inflammation
5. angiocarditis – inflammation
6. pericardium – tissue, structure
7. epicardium – tissue, structure
8. endocardium – tissue, structure
9. myocardial – pertaining to
10. angiosclerosis – abnormal hardening

11. cardiomyopathy – disease
12. cardiopulmonary – pertaining to

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Understand

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 9

1. pericarditis – around
2. endocarditis – in, inside
3. pericardium – around
4. epicardium – upon
5. endocardium – in, inside

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Understand

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 10

1. pertaining to
2. condition
3. disease
4. pertaining to
5. inflammation
6. inflammation
7. inflammation
8. inside; inflammation
9. around; inflammation
10. around; tissue, structure
11. upon; tissue, structure
12. in, inside; tissue, structure

Learning Outcome: 01.7

Topic: How Medical Terms Are Translated

Blooms: Analyze

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 11

1. inflammation of the heart
2. inflammation around the heart
3. inflammation inside of the heart
4. inflammation of the heart muscle
5. inflammation of the vessels of the heart
6. tissue, structure around the heart
7. tissue, structure upon the heart
8. tissue, structure inside the heart
9. pertaining to heart muscle
10. abnormal hardening of the vessels
11. disease of heart muscle
12. pertaining to the heart and lungs

Learning Outcome: 01.7

Topic: How Medical Terms Are Translated

Blooms: Apply

Difficulty: 2 Medium

Category: Translation

Est Time: 0-1 minute

Exercise 12

1. end / arter / ectomy – removal of the inside of an artery
2. hyper / pituitary / ism – condition over active pituitary
3. pan / hypo / pituitary / ism – condition of all under active pituitary
4. ex / ost / osis – condition outside the bones

Learning Outcome: 01.5

Topic: Parts Used to Build Medical Language

Blooms: Apply

Difficulty: 3 Hard

Category: Challenge

Est Time: 0-1 minute