

CHAPTER 1

INTRODUCTION TO MEDICAL TERMINOLOGY

Learning Objectives

Upon completion of this chapter, you will be able to

- Discuss the four parts of medical terms.
- Recognize word roots and combining forms.
- Identify the most common prefixes and suffixes.
- Define word building and describe a strategy for translating medical terms.
- State the importance of correct spelling of medical terms.
- State the rules for determining singular and plural endings.
- Discuss the importance of using caution with abbreviations.
- Recognize the documents found in a medical record.
- Recognize the different healthcare settings.
- Understand the importance of confidentiality.

Worksheet 1A

New Word Roots Handout

Directions: Write out the meaning for each of the following combining forms.

1. aden/o _____
2. carcin/o _____
3. cardi/o _____
4. chem/o _____
5. cis/o _____
6. dermat/o _____
7. enter/o _____
8. gastr/o _____
9. gynec/o _____
10. hemat/o _____
11. hydr/o _____
12. immun/o _____
13. laryng/o _____
14. nephr/o _____
15. neur/o _____
16. ophthalm/o _____
17. ot/o _____
18. path/o _____
19. pulmon/o _____
20. rhin/o _____

Worksheet 1B

New Prefixes Handout

Directions: Write out the meaning of each of the following prefixes.

1. a- _____
2. an- _____
3. ante- _____
4. anti- _____
5. auto- _____
6. brady- _____
7. contra- _____
8. de- _____
9. dys- _____
10. endo- _____
11. epi- _____
12. eso- _____
13. eu- _____
14. ex- _____
15. exo- _____
16. extra- _____
17. hetero- _____
18. homo- _____
19. hydro- _____
20. hyper- _____
21. hypo- _____
22. in- _____
23. inter- _____
24. intra- _____
25. macro- _____

26. micro- _____
27. myo- _____
28. neo- _____
29. pan- _____
30. para- _____
31. per- _____
32. peri- _____
33. post- _____
34. pre- _____
35. pro- _____
36. pseudo- _____
37. retro- _____
38. sub- _____
39. supra- _____
40. tachy- _____
41. trans- _____
42. ultra- _____
43. un- _____
44. bi- _____
45. hemi- _____
46. mono- _____
47. multi- _____
48. nulli- _____
49. poly- _____
50. primi- _____
51. quadri- _____
52. semi- _____
53. tetra- _____
54. tri- _____

Worksheet 1C

New Suffixes Handout

Directions: Write out the meaning for each of the following suffixes.

1. -algia _____
2. -cele _____
3. -cyte _____
4. -dynia _____
5. -ectasis _____
6. -gen _____
7. -genesis _____
8. -genic _____
9. -ia _____
10. -iasis _____
11. -iatry _____
12. -ism _____
13. -itis _____
14. -logist _____
15. -logy _____
16. -lysis _____
17. -lytic _____
18. -malacia _____
19. -megaly _____
20. -oid _____
21. -oma _____
22. -osis _____
23. -pathy _____
24. -phobia _____
25. -plasia _____

26. -plasm _____
27. -ptosis _____
28. -rrhage _____
29. -rrhagia _____
30. -rrhea _____
31. -rrhexis _____
32. -sclerosis _____
33. -stenosis _____
34. -therapy _____
35. -trophy _____
36. -ule _____
37. -centesis _____
38. -ectomy _____
39. -ostomy _____
40. -otomy _____
41. -pexy _____
42. -plasty _____
43. -rrhaphy _____
44. -gram _____
45. -graph _____
46. -graphy _____
47. -meter _____
48. -metry _____
49. -scope _____
50. -scopy _____

Worksheet 1D

Word Building Practice

Directions: After each word part, write out its meaning. Then on the blank line, combine the word parts into a single word and write out its meaning.

1. aden/o _____

-pathy _____

2. gastr/o _____

-algia _____

3. gynec/o _____

-logy _____

4. nephro _____

-ectomy _____

5. pan- _____

cardi/o _____

-itis _____

6. dys- _____

-plasia _____

Directions: Break down each term into its word parts. Then write out the meaning of each word part. Finally, write out the meaning of the entire word.

7. rhinorrhea _____

8. carcinogenic _____

9. otoscope _____

10. hypertrophy _____

11. epigastric _____

Worksheet 1E

Making Plurals

Directions: Write the plural form for each singular term given below.

1. bursa _____
2. thorax _____
3. apex _____
4. carcinoma _____
5. diagnosis _____
6. criterion _____
7. bronchus _____
8. diverticulum _____
9. deformity _____
10. larynx _____

Worksheet 1F

Medical Records

Directions: Define each document found in a medical record in the space provided.

1. History and Physical _____

2. Physician's Orders _____

3. Nurse's Notes _____

4. Physician's Progress Notes _____

5. Consultation Reports _____

6. Ancillary Reports _____

7. Diagnostic Reports _____

8. Informed Consent _____

9. Operative Report _____

10. Anesthesiologist's Report _____

11. Pathologist's Report _____

12. Discharge Summary _____

Worksheet 1G

Unscramble

Directions: Unscramble each medical term below. A definition for the term is given below each scrambled term.

1. d o l o b _____
Meaning of combining form *hemat/o*
2. c o h a t s m _____
Meaning of combining form *gastr/o*
3. g i a t n a s _____
Meaning of prefix *anti-*
4. i t w u t o h _____
Meaning of prefix *an-*
5. w e t e b e n _____
Meaning of prefix *inter-*
6. l o m r n a _____
Meaning of prefix *eu-*
7. n i t a i l o d _____
Meaning of suffix *-ectasis*
8. a m l r e e n t g e n _____
Meaning of suffix *-megaly*
9. g r a e d h n i n _____
Meaning of suffix *-sclerosis*
10. i a m o m f i a t n l n _____
Meaning of suffix *-itis*

Worksheet 1H

Practice Building Medical Terms

Directions: Use the word parts list below to build a medical term for each definition. In this exercise some of the word parts are used more than once to illustrate how using the same word parts in different combinations produces terms with very different meanings.

| Word Parts | Category | Meaning |
|------------|-----------|------------------------|
| -al | suffix | pertaining to |
| -ary | suffix | pertaining to |
| bronch/o | word root | bronchus |
| crani/o | word root | skull |
| -ectomy | suffix | surgical removal |
| intra- | prefix | within |
| -itis | suffix | inflammation |
| -logy | suffix | study of |
| neur/o | word root | nerve |
| -plasty | suffix | surgical repair |
| pulmon/o | word root | lung |
| -scope | suffix | instrument for viewing |
| tonsill/o | word root | tonsils |

- surgical removal of tonsils _____/_____
- study of the lungs _____/_____/_____
- pertaining to within the skull _____/_____/_____
- study of nerves _____/_____/_____
- surgical repair of the skull _____/_____/_____
- instrument for viewing the bronchus _____/_____/_____
- inflammation of the tonsils _____/_____
- inflammation of nerves _____/_____
- pertaining to within the lungs _____/_____/_____
- surgical repair of a bronchus _____/_____/_____

Worksheet 11

Word Search Puzzle

Directions: Find and circle the answer for each fill-in-the-blank question in the word search puzzle.

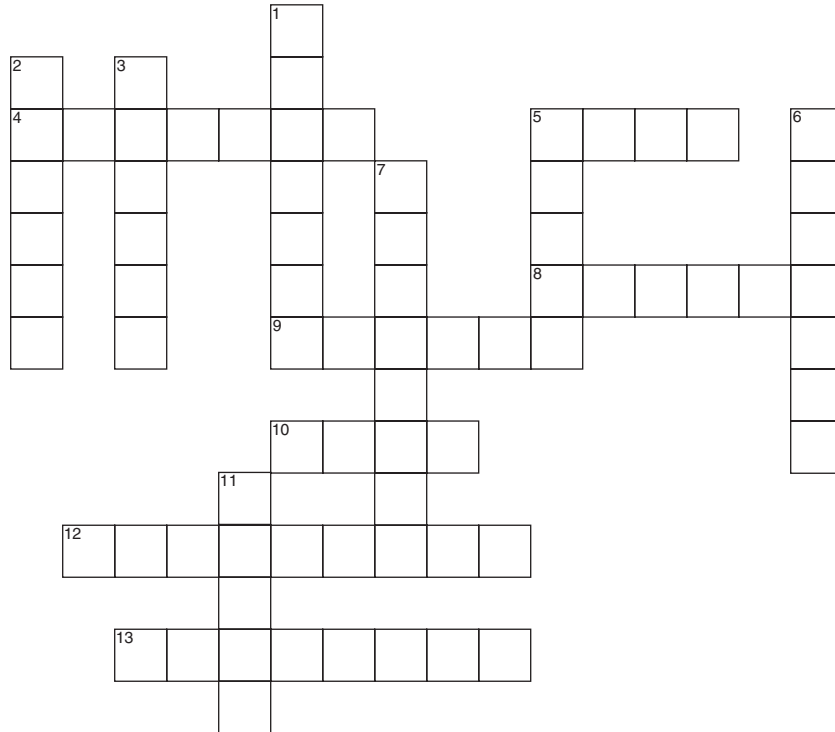
G R Q L F X F B G N T V
E B H K Q G Q N T N F B
S P B C K F I V C P E K
A D N N G W R L W T S Z
E F N Y O L L E W J L D
S X E R D H N E C K O X
I K R N C R E R V O W J
D A Z R O N L H C X R V
N P T N K N G T K W M D
V N O I T C U R T S E D
T L M H A R D E N I N G
M R K T C M X R D Y K M

1. The suffix *-pathy* means _____.
2. The suffix *-stenosis* means _____.
3. The suffix *-sclerosis* means _____.
4. The suffix *-gram* means _____.
5. The suffix *-lysis* means _____.
6. The prefix *brady-* means _____.
7. The prefix *inter-* means _____.
8. The prefix *nulli-* means _____.
9. The prefix *tri-* means _____.
10. The prefix *neo-* means _____.

Worksheet 1J

Crossword Puzzle

Directions: Use the definitions given to complete the crossword puzzles. For all answers that are suffixes or prefixes, do not include the hyphen in your answers.



ACROSS

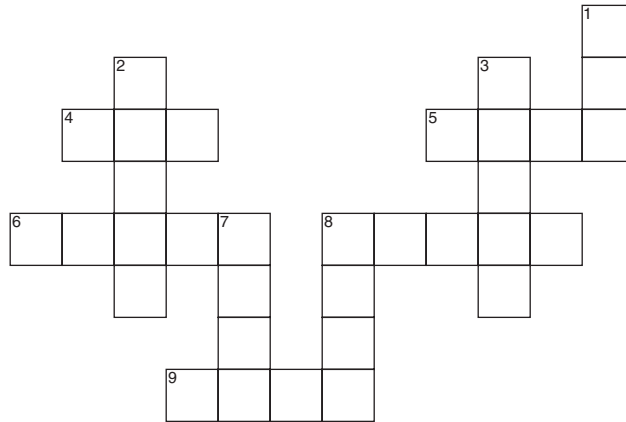
- 4 treatment
- 5 brady-
- 8 fear
- 9 Suffix meaning surgical removal
- 10 tachy-
- 12 hardened
- 13 narrowing

DOWN

- 1 -rrhexis
- 2 drooping
- 3 Suffix meaning enlargement
- 5 Suffix meaning visually examining
- 6 Suffix meaning abnormal softening
- 7 Suffix meaning puncture to withdraw fluid
- 11 Suffix meaning instrument for measuring

Crossword Puzzle

Directions: Use the definitions given to complete the crossword puzzles. For all answers that are suffixes or prefixes, do not include the hyphen in your answers.



ACROSS

- 4 beneath, under
- 5 against
- 6 inside, within
- 8 excessive, above normal
- 9 one

DOWN

- 1 above, upon
- 2 many
- 3 between
- 7 self
- 8 deficient, below normal

Quiz 1A

New Word Parts Quiz

Directions: Define each of the following word parts.

1. cis/o _____
2. dermat/o _____
3. hemat/o _____
4. neur/o _____
5. pulmon/o _____
6. auto- _____
7. brady- _____
8. inter- _____
9. peri- _____
10. post- _____
11. trans- _____
12. eu- _____
13. poly- _____
14. hemi- _____
15. hypo- _____
16. -cyte _____
17. -osis _____
18. -malacia _____
19. -logy _____
20. -sclerosis _____
21. -rrhea _____
22. -ectomy _____
23. -ostomy _____
24. -scope _____
25. -metry _____

Quiz 1B

Spelling Quiz

Directions: Write each term as your instructor pronounces it.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____
21. _____
22. _____
23. _____
24. _____
25. _____

Quiz 1C

Chapter Review

PART I: True/False

Directions: Write true or false in the blank before each number.

- _____ 1. The word root is the foundation of a medical term.
- _____ 2. The most common combining vowel is *i*.
- _____ 3. Prefixes add meaning to a term such as disease.
- _____ 4. Many terms have alternate pronunciations.
- _____ 5. Combining vowels are translated as *pertaining to*.
- _____ 6. Healthcare professionals have to be careful because some terms have the same beginning sound but are spelled differently.
- _____ 7. Suffixes add meaning to a term such as a procedure.
- _____ 8. A combining form is a word root and its suffix.
- _____ 9. HIPAA sets federal standards to protect a patient's medical record.
- _____ 10. Using one's own abbreviations is a good way to save time.
- _____ 11. It is possible to build a medical term from only a prefix and a suffix.
- _____ 12. The only word part found in every medical term is a word root.

PART II: Building Medical Terms

Directions: Fill in the blanks with the requested information.

1. In the term *otitis*, the suffix is _____, and this suffix means _____.
2. In the term *laryngectomy*, the word root is _____, and this word root means _____.
3. In the term *bradycardia*, the prefix is _____, and this prefix means _____.
4. Study the term *epigastric*.
What is the prefix and what does it mean? _____
What is the word root and what does it mean? _____
What is the suffix and what does it mean? _____
What does the entire term mean? _____
5. How many word roots are in the term *gastroenteritis*? _____
What are they? _____
6. Build a term for the phrase *abnormal softening of a nerve*.

7. Build a term for the phrase *discharge from the nose*.

8. Build a term for the phrase *study of the eye*.

9. Build a term for the phrase *gland tumor*.

10. Does the term built from *pulmon/o* and *-logy* require a combining vowel? _____
Explain your answer. _____

PART III: Matching

Directions: Match each term on the left with its definition below. Enter the letter for your answer in the blank before each number.

- | | |
|---|---|
| _____ 1. history and physical | a. Provides services that do not require overnight hospital stay |
| _____ 2. acute care hospital | b. Reports results of tests performed on patient |
| _____ 3. consultation report | c. Provides services in prepaid system |
| _____ 4. home healthcare | d. Written by admitting physician, includes initial diagnoses |
| _____ 5. ancillary report | e. Provides long-term care for patients unable to care for themselves |
| _____ 6. ambulatory care center | f. Complete list of care, medication, tests, and treatments ordered for patient |
| _____ 7. nurse's notes | g. Reports results from studying tissue removed from patient |
| _____ 8. rehabilitation center | h. Provides care for very specific types of diseases |
| _____ 9. diagnostic reports | i. Daily record of patient's condition, results of tests, and updated diagnoses |
| _____ 10. specialty care hospital | j. Record of patient's care throughout day |
| _____ 11. operative report | k. Provides services in patient's own home |
| _____ 12. physician's office | l. Written by specialist who has seen patient |
| _____ 13. discharge summary | m. Provides services for terminally ill patients |
| _____ 14. hospice | n. Relates details regarding substances given to patient during surgery |
| _____ 15. pathologist's report | o. Written by surgeon |
| _____ 16. health maintenance organization | p. Provides intensive physical and occupational therapy |
| _____ 17. physician's orders | q. Comprehensive outline of patient's entire hospital stay |
| _____ 18. nursing home | r. Provides services in private office setting |
| _____ 19. physician's progress notes | s. Reports results from various treatments and therapies patient has received |
| _____ 20. anesthesiologist's report | t. Provides services for a short period of time |

Chapter 1 Answer Keys

Worksheet 1A Answer Key

1. gland
2. cancer
3. heart
4. chemical
5. to cut
6. skin
7. small intestine
8. stomach
9. female
10. blood
11. water
12. immune
13. voice box
14. kidney
15. nerve
16. eye
17. ear
18. disease
19. lung
20. nose

Worksheet 1B Answer Key

1. without, away from
2. without
3. before, in front of
4. against
5. self
6. slow
7. against
8. without
9. painful, difficult, abnormal
10. within, inner
11. upon, over
12. inward
13. normal, good
14. external, outward
15. outward
16. outside of
17. different
18. same
19. water
20. over, above
21. under, below
22. not
23. among, between
24. within, inside
25. large
26. small
27. to shut
28. new
29. all
30. beside, beyond, near, two like parts of a pair
31. through
32. around
33. after
34. before, in front of
35. before
36. false
37. backward, behind
38. below, under
39. above
40. rapid, fast
41. through, across
42. beyond, excess
43. not
44. two
45. half
46. one
47. many
48. none
49. many
50. first
51. four
52. partial, half
53. four
54. three

Worksheet 1C Answer Key

1. pain
2. hernia, protrusion
3. cell
4. pain
5. dilation
6. that which produces
7. produces, generates
8. producing, produced by
9. state, condition
10. abnormal condition
11. medical treatment
12. state of
13. inflammation
14. one who studies
15. study of
16. destruction
17. destruction
18. abnormal softening
19. enlargement, large
20. resembling
21. tumor, mass, swelling
22. abnormal condition
23. disease
24. fear
25. development, growth
26. formation, development
27. drooping
28. excessive, abnormal flow
29. abnormal flow condition
30. discharge, flow
31. rupture
32. hardening
33. narrowing
34. treatment
35. nourishment, development
36. small
37. puncture to withdraw fluid
38. surgical removal
39. surgically create an opening
40. cutting into
41. surgical fixation
42. surgical repair
43. suture
44. record or picture
45. instrument for recording
46. process of recording
47. instrument for measuring
48. process of measuring
49. instrument for viewing
50. process of visually examining

Worksheet 1D Answer Key

1. aden/o = gland; -pathy = disease; gland disease
2. gastr/o = stomach; -algia = pain; stomach pain
3. gynec/o = female; -logy = study; study of female
4. nephro = kidney; -ectomy = surgical removal; surgical removal of kidney
5. pan- = all; cardi/o = heart; -itis = inflammation; inflammation of all heart
6. dys- = abnormal, painful; -plasia = development; abnormal development
7. rhin/o = nose; -rrhea = flow, discharge; discharge from the nose
8. carcin/o = cancer; -genic = producing; cancer producing
9. ot/o = ear; -scope = instrument to view; instrument to view the ear
10. hyper- = excessive; -trophy = development; excessive development
11. epi- = above; gastr/o = stomach; -ic = pertaining to; pertaining to above the stomach

Worksheet 1E Answer Key

1. bursae
2. thoraces
3. apices
4. carcinomata
5. diagnoses
6. criteria
7. bronchi
8. diverticula
9. deformities
10. larynges

Worksheet 1F Answer Key

1. **History and Physical**—Written or dictated by admitting physician; details patient’s history, results of physician’s examination, initial diagnoses, and physician’s plan of treatment
2. **Physician’s Orders**—Complete list of care, medications, tests, and treatments physician orders for patient
3. **Nurse’s Notes**—Record of patient’s care throughout day; includes vital signs, treatment specifics, patient’s response to treatment, and patient’s condition
4. **Physician’s Progress Notes**—Physician’s daily record of patient’s condition, results of physician’s examinations, summary of test results, updated assessment and diagnoses, and further plans for patient’s care
5. **Consultation Reports**—Report given by specialist whom physician has asked to evaluate patient
6. **Ancillary Reports**—Reports from various treatments and therapies patient has received, such as rehabilitation, social services, respiratory therapy, or dietician
7. **Diagnostic Reports**—Results of all diagnostic tests performed on patient, principally from lab and medical imaging (e.g., X-rays and ultrasound)
8. **Informed Consent**—Document voluntarily signed by patient/responsible party that clearly describes purpose, methods, procedures, benefits, and risks of diagnostic or treatment procedure
9. **Operative Report**—Report from surgeon detailing operation; includes pre- and post-operative diagnosis, specific details of surgical procedure itself, and how patient tolerated procedure
10. **Anesthesiologist’s Report**—Relates details regarding drugs given to patient, patient’s response to anesthesia, and vital signs during surgery
11. **Pathologist’s Report**—Report given by pathologist who studies tissue removed from patient (e.g., bone marrow, blood, or tissue biopsy)
12. **Discharge Summary**—Comprehensive outline of patient’s entire hospital stay; includes condition at time of admission, admitting diagnosis, test results, treatments and patient’s response, final diagnosis, and follow-up plans

Worksheet 1G Answer Key

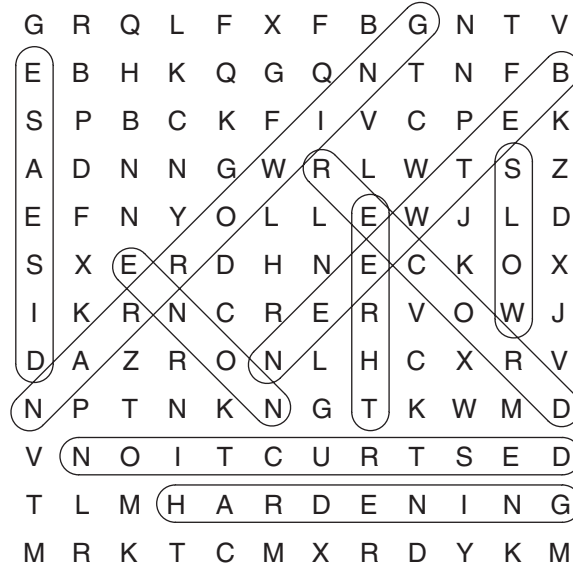
1. blood
2. stomach
3. against
4. without
5. between
6. normal
7. dilation
8. enlargement
9. hardening
10. inflammation

Worksheet 1H Answer Key

1. tonsillectomy
2. pulmonology
3. intracranial
4. neurology
5. cranioplasty
6. bronchoscope
7. tonsillitis
8. neuritis
9. intrapulmonary
10. bronchoplasty

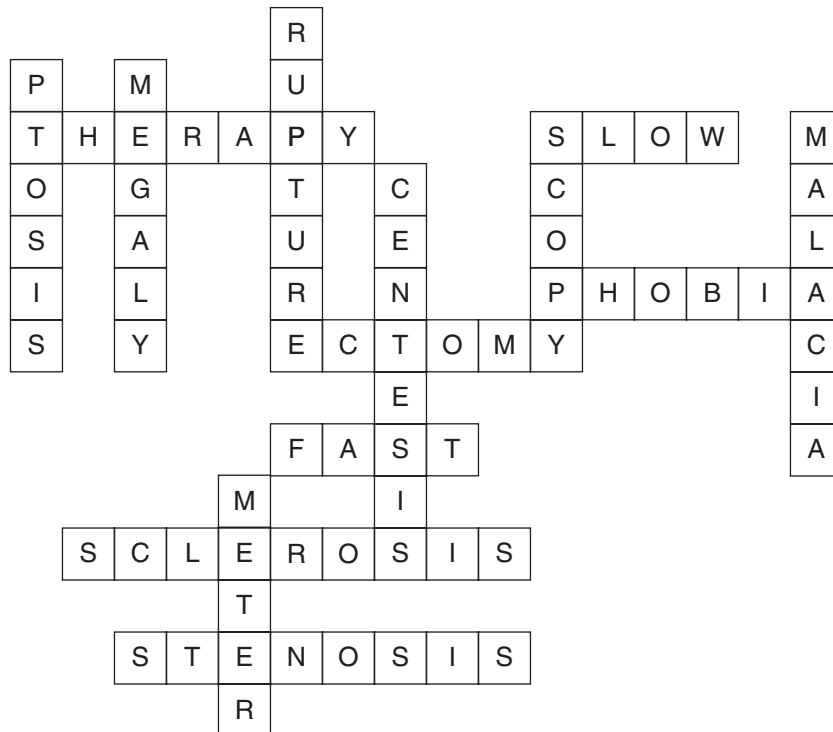
Worksheet 1I Answer Key

- | | |
|----------------|------------|
| 1. disease | 6. slow |
| 2. narrowing | 7. between |
| 3. hardening | 8. none |
| 4. record | 9. three |
| 5. destruction | 10. new |

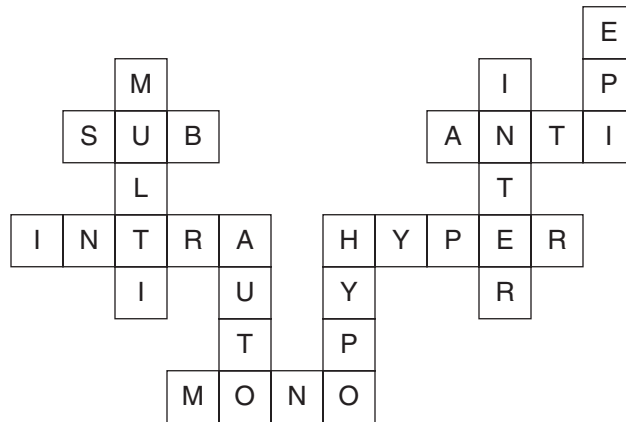


Worksheet 1J Answer Key

Solution:



Solution:



Quiz 1A Answer Key

1. to cut
2. skin
3. blood
4. nerve
5. lung
6. self
7. slow
8. among, between
9. around
10. after
11. through, across
12. normal, good
13. many

Quiz 1B Answer Key

1. carcin/o
2. gynec/o
3. hydr/o
4. laryng/o
5. ophthalm/o
6. dys-
7. hyper-
8. pseudo-
9. tachy-
10. intra-
11. infra-
12. retro-
13. quad-
14. half
15. under, below
16. cell
17. abnormal condition
18. abnormal softening
19. study of
20. hardening
21. flow, discharge
22. surgical removal
23. create a new opening
24. instrument to view
25. process of measuring
14. nulli-
15. para-
16. -cise
17. -plasia
18. -rrhexis
19. -ptosis
20. -megaly
21. -ectasis
22. -rrhage
23. -centesis
24. -graphy
25. -rrhaphy

Quiz 1C Answer Key

True/False

1. True
2. False
3. False
4. True
5. False
6. True
7. True
8. False
9. True
10. False
11. True
12. False

Building Medical Terms

1. -itis; inflammation
2. laryng/o; larynx or voice box
3. brady-; slow
4. epi-; upon, over; gastr/o; stomach; -ic; pertaining to; pertaining to over the stomach
5. two; gastr/o and enter/o
6. neuromalacia
7. rhinorrhea
8. ophthalmology
9. adenoma
10. yes; the suffix begins with a consonant

Matching

1. d
2. t
3. l
4. k
5. s
6. a
7. j
8. p
9. b
10. h
11. o
12. r
13. q
14. m
15. g
16. c
17. f
18. e
19. i
20. n