Scientific English

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Identifying Word Roots and Combining Forms

Underline the word roots in the following medical words.

Medical Word	Meaning
1. nephritis	inflammation of the kidneys
2. arthrodesis	fixation of a joint
3. dermatitis	inflammation of the skin
4. dentist	specialist in teeth
5. gastrectomy	excision of the stomach
6. chondritis	inflammation of cartilage
7. hepatoma	tumor of the liver
8. muscular	pertaining to muscles
9. gastria	condition of the stomach
1.0	

tumor of the bone

10. osteoma

Identifying Word Roots and Combining Forms

Underline the word roots in the following terms.

- 1. nephritis
- 2. arthrodesis
- 3. dermatitis
- 4. dentist
- 5. gastrectomy
- 6. chondritis

- 7. <u>hepat</u>oma
- 8. muscular
- 9. gastria
- 10. <u>oste</u>oma

Identifying Suffixes and Prefixes

Pronounce the following medical terms. Then analyze each term and write the suffix in the right-hand column. The first suffix is completed for you.

Term	Suffix	
I. thoracotomy thōr-ă-KŎT-ō-mē	-tomy	
2. gastroscope	2.0	
GĂS-trō-skōp		
3. tonsillitis		
tŏn-sĭl-Ī-tĭs		
4. gastroma	97	
GĂS-trō-mă		
5. tonsillectomy		
tŏn-sĭl-ĔK-tō-mē		

Pronounce the following medical terms. Then analyze each term and write the element that is a prefix in the right-hand column. The first prefix is completed for you.

Term	Prefix
6. anesthesia ăn-ĕs-THĒ-zē-ă	an-
7. hyperthermia hī-pĕr-THĔR-mē-ă	
8. intramuscular ĭn-tră-MŬS-kū-lăr	
9. paranasal păr-ă-NĀ-săl	
10. polyuria pŏl-ē-Ū-rē-ă	

Identifying Suffixes and Prefixes

Analyze each term and write the element from each that is a suffix.

- 1.-tomy
- 2. -scope
- 3. -itis
- 4. -oma
- 5. -ectomy

Analyze each term and write the element from each that is a prefix.

- 6. an-
- 7. hyper-
- 8. intra-
- 9. para-
- 10. poly-

PROVIDE A DEFINITION OF THESE TERMS

Term

- I. gastritis găs-TRĬ-tĭs
- 2. nephritis něf-RĪ-tĭs
- 3. gastrectomy găs-TRĚK-tō-mē
- 4. osteoma

ŏs-tē-Ō-mă

5. hepatoma

hĕp-ă-TŌ-mă

6. hepatitis

hĕp-ă-TĪ-tĭs

Definition

Defining and Building Medical Words

Use the three basic steps to define the following words.

Term	Definition
l. gastritis găs-TRĪ-tĭs	inflammation of the stomach
2. nephritis nĕf-RĪ-tĭs	inflammation of the kidney(s)
3. gastrectomy găs-TRĚK-tō-mē	excision of the stomach
4. osteoma ŏs-tē-Ō-mă	tumor of bone
5. hepatoma hĕp-ă-TO-mă	tumor of the liver
6. hepatitis hĕp-ă-TI-tĭs	inflammation of the liver

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.

Meaning
incision of the perineum
excision (of all or part)* of the colon
surgical puncture of a joint (to remove fluid)
excision of the spleen
forming an opening (mouth) into the colon
instrument to cut bone
incision of the tympanic membrane
forming an opening (mouth) into the trachea
excision of a breast
incision to remove a stone or calculus
excision of hemorrhoids

Build a surgical word that means

2. forming an opening (mouth) into the colon:
3. excision of the colon:
4. instrument to cut bone:
5. surgical puncture of a joint:
6. incision to remove a stone:
7. excision of a breast:
8. incision of the tympanic membrane:
9. forming an opening (mouth) into the trachea:
20. excision of the spleen:

Building Surgical Words

- I. episiotomy
- 2. colectomy
- 3. arthrocentesis
- 4. splenectomy
- 5. colostomy
- 6. osteotome
- 7. tympanotomy
- 8. tracheostomy

- 9. mastectomy
- 10. lithotomy
- II. hemorrhoidectomy
- 12. colostomy
- 13. colectomy
- 4. osteotome
- 15. arthrocentesis
- 16. lithotomy
- 17. mastectomy
- 18. tympanotomy
- 19. tracheostomy
- 20. splenectomy



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

II. 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:

Building More Surgical Words

- I. arthrodesis
- 2. rhinoplasty
- 3. tenoplasty
- 4. myorrhaphy
- 5. mastopexy
- 6. cystormaphy
- 7. osteoclasis
- 8. lithotripsy
- 9. enterolysis

- 10. neurotripsy
- 11. rhinoplasty
- 12. arthrodesis
- 13. myorrhaphy
- 14. mastopexy
- 15. cystorrhaphy
- 16. tenoplasty
- 17. osteoclasis
- 18. lithotripsy
- 19. enterolysis
- 20. neurotripsy

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)

Building Pathological and Related Words

- I. bronchiectasis
- 2. cholelith
- 3. carcinogenesis
- 4. osteomalacia
- 5. hepatomegaly
- 6. cholelithiasis

- 7. hepatocele
- 8. neuropathy
- 9. dermatosis
- 10. hemiplegia
- 11. dysphagia
- 12. aphasia
- 13. cephalalgia
- 14. blepharospasm
- 15. hyperplasia or hypertrophy

Forming Plural Words

Review the guidelines for plural suffixes

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	diagnoses	Drop the is and add es.
2. fornix	25	-
3. vertebra	∑ 	9-
4. keratosis	Na	<u> </u>
5. bronchus	P o	
6. spermatozoon	(HS
7. septum	25	-
8. coccus	D2 → 1s	(-
9. ganglion	77	72
10. prognosis	FS	22
11. thrombus	16.	HS
12. appendix	25	·
13. bacterium	DE → 10 × 10 × 10 × 10 × 10 × 10 × 10 × 10	c
14. testis	P4	72
15. nevus	1 <u>5</u> 77	

Forming Plural Words

Singular	Plural	Rule	Singular	Plural	Rule
I. diagnosis	diagnoses	Drop is and add es.	9. ganglion	ganglia	Drop on and add a.
2. fornix	fornices	Drop ix and add ices.	10. prognosis	prognoses	Drop is and add es.
3. vertebra	vertebrae	Retain a and add e.	11. thrombus	thrombi	Drop us and add i.
4. keratosis	keratoses	Drop is and add es.	12. appendix	appendices	Drop ix and add ices.
5. bronchus	bronchi	Drop us and add i.	13. bacterium	bacteria	Drop um and add a.
6. spermatozoon	spermatozoa	Drop on and add a.	14. testis	testes	Drop is and add es.
7. septum	septa	Drop um and add a.	15. nevus	nevi	Drop us and add i.
8. coccus	cocci	Drop us and add i.			

Identifying and Defining Prefixes

Place a slash after each of the following prefixes and then define the prefix. The first one is completed for you.

Word	Definition of Prefix
l.inter/dental	between
2. hypodermic	
3. epidermis	
4. retroversion	
5. sublingual	ATS
6.transvaginal	-
7. infracostal	
8. postnatal	<u> 20-</u>
9. quadriplegia	
10. hypercalcemia	ATT
II.primigravida	·-
12. microscope	
13.triceps	

14. polydipsia
15.abduction
16.anesthesia
17.macrocyte
18.intramuscular
19.suprapelvic
20. diarrhea
21.circumduction
22. a d d u c t i o n
23. periodontal
24. bradycardia

	 <u> </u>	

Identifying and Defining Pefixes

Word	Definition of Prefix	Word	Definition of Prefix
I. inter/dental	between	13. tri/ceps	three
2. hypo/dermic	under, below, deficient	I 4. poly/dipsia	many, much
3. epi/dermis	above, upon	15. ab/duction	from, away from
4. retro/version	backward, behind	I 6. an/esthesia	without, not
5. sub/lingual	under, below	17. macro/cyte	large
6. trans/vaginal	through, across	18. intra/muscular	in, within
7. infra/costal	under, below	19. supra/pelvic	above, excessive, superior
8. post/natal	after, behind	20. dia/rrhea	through, across
9. quadri/plegia	four	21. circum/duction	around
10. hyper/calcemia	excessive, above normal	22. ad/duction	toward
II. primi/gravida	first	23. peri/odontal	around
12. micro/scope	small	24. brady/cardia	slow

Use esophag/o (esophagus) to build words that mean:	
I. pain in the esophagus	
2. spasm of the esophagus	
3. stricture or narrowing of the esophagus	
Use gastr/o (stomach) to build words that mean:	
4. inflammation of the stomach	
5. pain in the stomach	
6. disease of the stomach	
Use duoden/o (duodenum), jejun/o (jejunum), or ile/o (ileum) to build words that mean:	
7. excision of all or part of the jejunum	
8. relating to the duodenum	
9. inflammation of the ileum	
In pertaining to the jejunum and ileum	

Use enter/o (usually small intestine) to build words that mean:

I I. inflammation of the small intestine	
12. disease of the small intestine	
13. inflammation of the small intestine and colon	
Use col/o (colon) to build words that mean:	
14. inflammation of the colon	
15. pertaining to the colon and rectum	- 1
16. prolapse or downward displacement of the colon	

- I. esophagodynia, esophagalgia
- 2. esophagospasm
- 3. esophagostenosis
- 4. gastritis
- 5. gastrodynia, gastralgia
- 6. gastropathy
- 7. jejunectomy
- 8. duodenal
- 9. ileitis
- 10. jejunoileal

- 11. enteritis
- 12. enteropathy
- 13. enterocolitis
- 14. colitis
- 15. colorectal
- 16. coloptosis
- 17. colopathy
- 18. proctostenosis, rectostenosis
- 19. rectocele, proctocele
- 20. proctoplegia, proctoparalysis
- 21. cholecystitis
- 22. cholelithiasis
- 23. hepatoma
- 24. hepatomegaly
- 25. pancreatitis

Use rhin/o (nose) to build words that mean:	
I. discharge from the nose	
2. inflammation of (mucous membranes of the) nose	
Use laryng/o (larynx [voice box]) to build words that mean:	
3. visual examination of larynx	
4. inflammation of larynx	
5. stricture or narrowing of the larynx	
Use bronch/o or bronchi/o (bronchus) to build words that mean:	
6. dilation or expansion of the bronchus	
7. disease of the bronchus	
8. spasm of the bronchus	

Use pneumon/o or pneum/o (air; lung) to build words that mean:
9. air in the chest (pleural space)
10. inflammation of lungs
Use pulmon/o (lung) to build words that mean:
II. specialist in lung (diseases)
12. pertaining to the lung
Use -pnea (breathing) to build words that mean:
13. difficult breathing
14. slow breathing
15. rapid breathing

- 1. rhinorrhea
- 2. rhinitis
- 3. laryngoscopy
- 4. laryngitis
- 5. laryngostenosis

- 6. bronchiectasis
- 7. bronchopathy
- 8. bronchospasm
- 9. pneumothorax
- 10. pneumonitis
- 11. pulmonologist
- 12. pulmonary, pulmonic
- 13. dyspnea
- 14. bradypnea
- 15. tachypnea

Building Medical Words

Use -osis (abnormal condition; increase [used primarily with blood cells]) to build words that mean:

- I. abnormal increase in erythrocytes _____
- 2. abnormal increase in leukocytes _____
- 3. abnormal increase in lymphocytes _____
- 4. abnormal increase in reticulocytes _____

Use immun/o (immune, immunity, safe) to build words that mean:	
12. specialist in study of immunity	
13. study of immunity	
Use splen/o (spleen) to build words that mean:	
14. herniation of the spleen	
15. destruction of the spleen	

Build surgical words that mean:

6. excision of the spleen	
7. removal of the thymus	
8. destruction of the thymus	
9. incision of the spleen	
0. fixation of (a displaced) spleen	

- I. erythrocytosis
- 2. leukocytosis
- 3. lymphocytosis
- 4. reticulocytosis

- 12. immunologist
- 13. immunology
- 14. splenocele
- 15. splenolysis
- 16. splenectomy
- 17. thymectomy
- 18. thymolysis
- 19. splenotomy
- 20. splenopexy

Building Medical Words
Use oste/o (bone) to build words that mean:
I. bone cells
2. pain in bones
3. disease of bones and joints
4. beginning or formation of bones
Use cervic/o (neck) to build words that mean:
5. pertaining to the neck
6. pertaining to the neck and arm
7. pertaining to the neck and face
Use myel/o (bone marrow; spinal cord) to build words that mean:
8. tumor of bone marrow
9. sarcoma of bone marrow (cells)
10. bone marrow cell
I I. resembling bone marrow
Use stern/o (sternum) to build words that mean:
12. pertaining to above the sternum
13. resembling the breastbone
Use arthr/o (joint) or chondr/o (cartilage) to build words that mean:
14. embryonic cell that forms cartilage
15. inflammation of a joint
16. inflammation of bones and joints
Use pelv/i (pelvis) to build a word that means:
17. instrument for measuring the pelvis
Use my/o (muscle) to build words that mean:
18. twitching of a muscle
19. any disease of muscle
20. rupture of a muscle

- I. osteocytes
- 2. ostealgia, osteodynia
- 3. osteoarthropathy
- 4. osteogenesis
- 5. cervical
- 6. cervicobrachial
- 7. cervicofacial
- 8. myeloma
- 9. myelosarcoma
- 10. myelocyte

- II. myeloid
- 12. suprasternal
- 13. sternoid
- 14. chondroblast
- 15. arthritis
- 16. osteoarthritis
- 17. pelvimeter
- 18. myospasm
- 19. myopathy
- 20. myorrhexis

Use nephr/o (kidney) to build words that mean:
I. stone in the kidney
2. abnormal condition of pus in the kidney
3. abnormal condition of water in the kidney
Use pyel/o (renal pelvis) to build words that mean:
4. dilation of renal pelvis
5. disease of renal pelvis
Use ureter/o (ureter) to build words that mean:
6. dilation of ureter
7. calculus in ureter
Use cyst/o (bladder) to build words that mean:
8. inflammation of bladder
9. instrument to view the bladder
Use vesic/o (bladder) to build words that mean:
10. herniation of bladder
II. pertaining to bladder and prostate

Use urethr/o (urethra) to build words that mean:
12. narrowing or stricture of urethra
Use ur/o (urine, urinary tract) to build words that mean:
14. radiography of urinary tract
Use the suffix -uria (urine) to build words that mean:
16. difficult or painful urination
17. scanty urination
Use orchid/o or orchi/o (testes) to build words that mean:
18. disease of testes
19. pain in testes

- I. nephrolith
- 2. nephropyosis, pyonephrosis
- 3. hydronephrosis, nephrohydrosis
- 4. pyelectasis, pyelectasia
- 5. pyelopathy
- 6. ureterectasis, ureterectasia
- 7. ureterolith
- 8. cystitis
- 9. cystoscope
- 10. vesicocele

- vesicoprostatic
- 12. urethrostenosis
- 13. urethrotome
- 14. urography
- 15. uropathy
- 16. dysuria
- 17. oliguria
- 18. orchidopathy, orchiopathy
- 19. orchialgia, orchiodynia, orchidalgia

Jse gynec/o (woman, female) to build words that mean:	
I. disease (specific to) women	
2. physician who specializes in diseases of the female	
Jse cervic/o (neck; cervix uteri) to build words that mean:	
3. inflammation of cervix uteri and vagina	
4. pertaining to cervix uteri and bladder	
Jse colp/o (vagina) to build words that mean:	
5. instrument used to examine the vagina	
6. visual examination of the vagina	
Jse vagin/o (vagina) to build words that mean:	
7. inflammation of the vagina	
8. herniation of the vagina	
Jse hyster/o (uterus) to build words that mean:	
9. myoma of uterus	
0. disease of uterus	

I I. radiography of uterus and oviducts
Use metr/o (uterus) to build words that mean:
12. hemorrhage from uterus
13. inflammation around the uterus
Use uter/o (uterus) to build words that mean:
14. herniation of the uterus
15. relating to uterus and cervix
6. pertaining to uterus and bladder
Use oophor/o (ovary) to build words that mean:
17. inflammation of an ovary
18. inflammation of an ovary and oviduct
Use salping/o (fallopian tube) to build words that mean:
19. herniation of a fallopian tube
20. radiography of uterine tubes

- I. gynecopathy
- 2. gynecologist
- 3. cervicovaginitis
- 4. cervicovesical
- 5. colposcope

- 16. uterovesical
- 17. oophoritis
- 18. oophorosalpingitis
- 19. salpingocele
- 20. salpingography

- 6. colposcopy
- 7. vaginitis
- 8. vaginocele
- 9. hysteromyoma
- 10. hysteropathy
- 11. hysterosalpingography
- 12. metrorrhagia
- 13. parametritis
- 14. uterocele
- 15. uterocervical

Use glyc/o (sugar) to build words that mean:	
I. blood condition of excessive glucose	
2. blood condition of deficiency of glucose	
3. formation of glycogen	
Use pancreat/o (pancreas) to build words that mean:	
4. inflammation of the pancreas	_
5. destruction of the pancreas	_
6. disease of the pancreas	
Use thyr/o or thyroid/o (thyroid gland) to build words that mean:	
7. inflammation of the thyroid gland	
8. enlargement of the thyroid	
Build surgical words that mean:	
9. excision of a parathyroid gland	- 1
In removal of the adrenal gland	

- I. hyperglycemia
- 2. hypoglycemia
- 3. glycogenesis

- 4. pancreatitis
- 5. pancreatolysis
- 6. pancreatopathy
- 7. thyroiditis
- 8. thyromegaly
- 9. parathyroidectomy
- 10. adrenalectomy

Jse encephal/o (brain) to build words that mean:	
I. disease of the brain	
2. herniation of the brain	
3. radiography of the brain	
Jse cerebr/o (cerebrum) to build words that mean:	
4. disease of the cerebrum	
5. inflammation of the cerebrum	
Jse crani/o (cranium [skull]) to build words that mean:	
6. herniation (through the) cranium	
7. instrument for measuring the skull	
Jse neur/o (nerve) to build words that mean:	
8. pain in a nerve	
9. specialist in the study of the nervous system	
0. crushing a nerve	

Use myel/o (bone marrow; spinal cord) to build words that mean:
II. herniation of the spinal cord
12. paralysis of the spinal cord
Use psych/o (mind) to build words that mean:
13. pertaining to the mind
14. abnormal condition of the mind
Use the suffix -kinesia (movement) to build words that mean:
15. movement that is slow
16. painful or difficult movement
Use the suffix -plegia (paralysis) to build words that mean:
17. paralysis of one half (of the body)
18. paralysis of four (limbs)
Use the suffix -phasia (speech) to build words that mean:
19. difficult speech
20. lacking or without speech

- I. encephalopathy
- 2. encephalocele
- 3. encephalography
- 4. cerebropathy
- 5. cerebritis

- dyskinesia
- 17. hemiplegia
- 18. quadriplegia
- 19. dysphasia
- 20. aphasia

- 6. craniocele
- 7. craniometer
- 8. neuralgia, neurodynia
- 9. neurologist
- 10. neurotripsy
- II. myelocele
- 12. myeloplegia
- 13. psychotic, psychic
- 14. psychosis
- 15. bradykinesia

Use ophthalm/o (eye) to build words that mean:
I. paralysis of the eye
2. study of the eye
Use pupill/o (pupil) to build a word that means:
3. examination of the pupil
Use kerat/o (cornea) to build words that mean:
4. softening of the cornea
5. instrument for measuring the cornea
Use scler/o (sclera) to build words that mean:
6. inflammation of the sclera
7. softening of the sclera
Use irid/o (iris) to build words that mean:
8. paralysis of the iris
9. herniation of the iris
Use retin/o (retina) to build words that mean:
10. disease of the retina

II. inflammation of the retina
Use blephar/o (eyelid) to build words that mean:
12. paralysis of the eyelid
13. prolapse of the eyelid
Use ot/o (ear) to build a word that means:
14. flow of pus from the ear
Use audi/o (hearing) to build a word that means:
15. instrument for measuring hearing
Use myring/o (tympanic membrane [eardrum]) to build a word that means:
16. instrument for cutting the eardrum
Use the suffix -opia (vision) to build words that mean:
17. dim or dull vision
18. excessive (far-sighted) vision

Use the suffix -acusis (hearing) to build words that mean:

19. without hearing _____

20. excessive (sensitivity to) hearing _____

- I. ophthalmoplegia, ophthalmoparalysis
- 2. ophthalmology
- 3. pupilloscopy
- 4. keratomalacia
- 5. keratometer
- 6. scleritis
- 7. scleromalacia
- 8. iridoplegia, iridoparalysis
- 9. iridocele
- 10. retinopathy

- 11. retinitis
- 12. blepharoplegia
- I 3. blepharoptosis
- 14. otopyorrhea
- 15. audiometer
- 16. myringotome
- 17. amblyopia
- 18. hyperopia
- 19. anacusis
- 20. hyperacusis

Thanks for Your Attention

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