

Quick Study®

ACADEMIC

MEDICAL TERMINOLOGY

THE BODY

FOUNDATION OF MEDICAL WORDS

A. Structure

Most medical words are composed of two or more terms. To define a medical word:

- divide the word into its terms
- analyze the terms
- define the word

Examples:

Pericarditis

peri = around; **card** = heart; **itis** = inflammation
Inflammation around the heart

Oncology

onco = tumor, mass; **logy** = study of
Study of tumors

B. Terms

Term + Term (.....+.....) = medical word

There are five categories of terms:

1. Prefix - beginning of a word

(ex., **pre** ____; **post** ____)

Designated by a “**_____**” **after** the term.

2. Suffix - ending of a word

(ex., ____ **stomy**; ____ **itis**)

Designated by a “**_____**” **before** the term.

3. Root - foundation/base of a word (ex., **hepat**; **gastr**)

4. Combining vowel - vowel (usually “o”) added to a root (ex., **gastr**o).

Use a combining vowel when joining:

- Root to another root (ex., **gastr**o**hepatitis**)
- Root to a suffix beginning with a consonant (ex., **cardiomegaly**)
- Combining form - root + vowel (ex., **hepat**o; **gastr**o)

Designated by a “**/**” between the root and the vowel

Examples:

Hyperleukocytosis

hyper (prefix) = excessive

leuko (combining form) = white

cyt (root) = cell

osis (suffix) = condition of

Definition: condition of excessive white blood cells (leukocytes)

Hematotoxic

hemato (combining form) = blood

tox (root) = poison

ic (suffix) = pertaining to

Definition: pertaining to blood poisoning

TIPS:

- Some terms have more than one definition. To determine the correct definition in a particular medical word, analyze the other terms in the word.

Example:

Poliomyelitis

polio = gray (matter)

myel = spinal cord, bone marrow

itis = inflammation

Definition: Inflammation of the gray matter of the spinal cord. The bone marrow does not have gray matter.

- Some terms may function as a root/combining form in one word and a suffix in another word. Classification depends upon the specific medical word.

Examples:

Cytology

cyto (combining form) = cell

logy (suffix) = study of

Definition: Study of cells

Erythrocyte

erythro (combining form) = red

cyte (suffix) = cell

Definition: Red blood cell

THE HUMAN BODY

A. Development

Cells - tissues - organs - systems - organism

1. Cells: Major Components

- Cell membrane
- Cytoplasm
- Nucleus

2. Tissues: Primary Types

- Connective
- Epithelium
- Muscle
- Nervous

3. Organs

- Composed of two or more different tissues
- Have specific functions

4. Systems: Related organs with common functions

5. Organism: A living person

B. Cavities

A space containing organs

1. Dorsal

- Cranial
- Vertebral (spinal)

2. Ventral

- Abdominal
- Pelvic
- Thoracic

C. Planes

An imaginary flat surface

1. Frontal – anterior/posterior

2. Sagittal – right/left

3. Transverse – upper/lower

D. Positions

A reference point for location or direction.

1. Anterior/Ventral – front of the body

Posterior/Dorsal – back of the body

2. Deep – away from the surface

Superficial – on the surface

3. Inferior – situated below

Superior – situated above

4. Lateral – pertaining to the side

5. Medial – pertaining to the middle

6. Prone – lying face down

Supine – lying face up

TERMS	DEFINITIONS	WORDS
acu-	needle	<i>acupuncture</i>
-algia	pain	<i>cephalgia</i>
anomal/o	irregular	<i>anomaly</i>
anthrop/o	man, human being	<i>anthroposomatology</i>
antr/o	antrum	<i>antrotomy</i>
aque/o	water	<i>aqueous</i>
axi/o	axis	<i>axial</i>
bar/o	weight, pressure	<i>barotaxis</i>
bio-, bi/o	life, living	<i>biogenesis</i>
blast/o, -blast	early embryonic stage, immature	<i>blastocyte</i>
calor/i	heat	<i>calorimetry</i>
carcin/o	cancer	<i>carcinoma</i>
cata-	down, downward	<i>catabiotic</i>
caud/o	tail	<i>caudal</i>
chem/o	chemical, chemistry	<i>chemosurgery</i>
chron/o	time, timing	<i>chronobiology</i>
-coma	deep sleep	<i>septicoma</i>
corpor/o	body	<i>corporeal</i>
cry/o	cold	<i>cryotherapy</i>
cyt/o, -cyte	cell	<i>cytology</i>
dors/o	back	<i>dorsoventral</i>
duct/o	to lead	<i>conduction</i>
dynam/o	power, strength	<i>dynamogenesis</i>
-dynia	pain	<i>gastrodynia</i>

equi-	equality, equal	<i>equilibrium</i>
eti/o	cause	<i>etiology</i>
fil/i, fil/o	thread	<i>filopressure</i>
-form	specified shape, form	<i>multiform</i>
-genesis	production, formation	<i>neogenesis</i>
ger/o, geront/o	aged, old age	<i>geriatrics</i>
gymn/o	naked	<i>gymnophobia</i>
-hexia	condition	<i>cachexia</i>
hist/o	tissue	<i>histoclastic</i>
hydr/o	water, hydrogen	<i>hydrolysis</i>
iatr/o	treatment, physician	<i>iatrogenic</i>
-ician	specialist	<i>clinician</i>
ion/o	ion	<i>ionogram</i>
kary/o	nucleus	<i>karyorrhesis</i>
kel/o	tumor, fibrous growth	<i>keloid</i>
-labile	unstable, perishable	<i>frigolabile</i>
later/o	side	<i>bilateral</i>
-logist	specialist	<i>neurologist</i>
-logy	study of	<i>cardiology</i>
-lucent	light-admitting	<i>radiolucent</i>
lumin/o	light	<i>luminescence</i>
ly/o	dissolve, loosen	<i>lyophilic</i>
medi/o	middle	<i>medial</i>
medic/o	heal, healing	<i>medical</i>
mer/o	part	<i>meromicrosomia</i>
meso-	middle	<i>mesoderm</i>
morph/o	shape, form	<i>dolichomorphia</i>
nom/o	custom, law	<i>nomotopic</i>
nomen-	name	<i>nomenclature</i>
nos/o	disease	<i>nosology</i>
nucle/o	nucleus	<i>nucleoplasm</i>
nutri/o	to nourish	<i>nutrition</i>
-oma	tumor, mass	<i>histiocytoma</i>
onc/o	tumor, mass	<i>oncogenesis</i>
organ/o	organ	<i>organomegaly</i>
path/o	disease	<i>pathogenic</i>
pharmac/o	drugs	<i>pharmacology</i>
physi/o	nature	<i>physiologist</i>
-plasm	formation, growth	<i>neoplasm</i>
-poiesis	formation	<i>cytopoiesis</i>
prote/o	protein	<i>proteolysis</i>
psamm/o	sand, sand-like material	<i>psammoma</i>
-puncture	to pierce a surface	<i>venipuncture</i>
pyr/o	fire, fever, heat	<i>pyrogen</i>
pyret/o	fever	<i>pyretogenic</i>
sanit/a	health	<i>sanitarian</i>
scirr/h/o	hard	<i>scirrhoma</i>
somat/o	body	<i>somatoscopia</i>
-some	body	<i>chromosome</i>
spectr/o	image, spectrum	<i>spectrocolorimeter</i>
system/o	system	<i>systematic</i>
techn/o	art, skill	<i>technology</i>
temp/o,	time, the temples	<i>tempostabile</i>
tempor/o		
the/o	a god	<i>theotherapy</i>
-therapy,	treatment	<i>therapeutics</i>
therapeut/o		
therm/o	heat	<i>thermometer</i>
-tumescence,	swelling	<i>detumescence</i>
tumesc/o		
-type, typ/o	class, representative form	<i>somatotype</i>
ventr/o	belly, front of the body	<i>ventrolateral</i>
-verse	turn	<i>transverse</i>
vir/o	virus	<i>virologist</i>
viscer/o	internal organs	<i>visceromegaly</i>
vit/o	life	<i>vitamin</i>
zyg/o	union, junction	<i>zygogenesis</i>

TERMINOLOGY SETS

A. DIRECTIONAL TERMS

ab-	away from
ad-	toward, near
ambi-	around, on both sides
amphi-	around, on both sides
ana-	upward, backward
ante-	before, forward
anter/o	front
anti-	against
apo-	away, separation
cata-	down, downward
circum-	around
contra-	against, opposite
dextr/o	right
dia-	through, apart
dis-	apart, to separate
ec-, ecto-	outside, out
en-, endo-	inside, within
epi-	above, over, upon
eso-	within
ex-	out, away from
exo-	outside of, outward
extra-	outside
fore-	before, in front of
hyper-	above, excessive, beyond
hypo-	under, deficient, below
infra-	below, beneath
inter-	between
intra-	within
juxta-	near
later/o	side
levo-	left
medi/o	middle
meso-	middle
para-	alongside, near, beyond, abnormal
per-	through, throughout
peri-	around, surrounding
post-	after, behind
poster/o	behind, towards the back
pre-	before, in front of
pro-	before
proxim/o	near
retro-	behind, backward
sinistr/o	left
sub-	under, beneath
super-	above, beyond
supra-	above, beyond
tel/e	distant, end
trans-	across

B. FIVE rrh's

-rrhagia, -rrhage	excessive flow
-rrhaphy	suture
-rrhea	flow, discharge
-rrhexis	rupture
rrhythm/o	rhythm

C. NUMERICAL VALUES

half	demi- hemi- semi-
one	mono- uni-
one and a half	sesqui-
two	bi- di-
three	tri-
four	tetra- quadri-
five	quinque- pent- penta-
six	hex- hexa- sex-

seven	hepta- sept- septi-
eight	octa- octi-
nine	noni-
ten (10 ¹)	deca-
hundred (10 ²)	hecto-
thousand (10 ³)	kilo-
million (10 ⁶)	mega-
billion (10 ⁹)	giga-
trillion (10 ¹²)	tera-
quadrillion (10 ¹⁵)	peta-
quintillion (10 ¹⁸)	exa-
one tenth (10 ⁻¹)	deci-
one hundredth (10 ⁻²)	centi-
one thousandth (10 ⁻³)	milli-
one millionth (10 ⁻⁶)	micro-
one billionth (10 ⁻⁹)	nano-
one trillionth (10 ⁻¹²)	pico-
one quadrillionth (10 ⁻¹⁵)	femto-
one quintillionth (10 ⁻¹⁸)	atto-

D. SURGICAL PROCEDURES

-centesis	surgical puncture of a cavity
-desis	surgical fixation, fusion
-ectomy	surgical removal
-pexy	fixation
-plasty	surgical correction/repair
-rrhaphy	suture
-sect	to cut
-stomy	surgical opening
-tomy	surgical incision
-tripsy	to crush, break

E. PATHOGENS

acar/o	mites
arachn/o	spider
bacteri/o	bacteria
-coccus	berry-shaped bacterium
fung/i	fungus, mushroom
helminth/o,	worm
-helminth	
hirud/i, hirudin/i	leech
ixod/i	ticks
myc/o	fungus
parasit/o	parasite
pedicul/o	louse
scolec/o	worm
verm/i	worm
vir/o	virus

SKELETAL SYSTEM

A. Bones

1. Formation – Ossification
2. Types – Long/short/flat/irregular
3. Tissues – Compact/spongy (cancellous)
4. Markings – Depressions/openings/projections
5. Axial skeleton
 - a. Skull
 - b. Vertebral column
 - c. Thoracic cage
6. Appendicular skeleton
 - a. Upper extremities
 - b. Lower extremities
 - c. Pectoral girdle
 - d. Pelvic girdle

B. Joints/articulations

1. Structural classification
 - a. Fibrous
 - b. Cartilaginous
 - c. Synovial
2. Functional classification
 - a. Synarthroses
 - b. Amphiarthroses
 - c. Diarthroses

TERMS	DEFINITIONS	WORDS
ankyl/o	stiff, crooked, bent	<i>ankylosis</i>
arthr/o	joint	<i>arthrodysplasia</i>
articul/o	joint	<i>articulation</i>
brachi/o	arm	<i>brachiocephalic</i>
burs/o	bursa	<i>bursolith</i>
calcane/o	heel	<i>calcaneodynia</i>
carp/o	wrist	<i>carpoposis</i>
centr/o	center	<i>centrosclerosis</i>
cephal/o	head	<i>cephaledema</i>
cervic/o	neck, cervix	<i>cervicofacial</i>
chir/o, cheir/o	hand	<i>chiropralgia</i>
chondr/o	cartilage	<i>chondrodystrophy</i>
cleid/o	clavicle	<i>cleidorrhaxis</i>
coccyg/o	coccyx	<i>coccygodynia</i>
cost/o	rib	<i>costosternal</i>
cox/o	hip	<i>coxarthrosis</i>
crani/o	skull	<i>cranioclast</i>
cubit/o	elbow, forearm	<i>genucubital</i>
dactyl/o	digit (finger or toe)	<i>dactylospasm</i>
eury-	wide, broad	<i>eurycephalic</i>
faci/o	face	<i>facioplasty</i>
femor/o	femur	<i>ischiofemoral</i>
fibul/o	fibula	<i>fibulocalcaneal</i>
geni/o	chin	<i>genioplasty</i>
gnath/o	jaw	<i>gnathoschisis</i>
gnos/o	knowledge	<i>acrognesia</i>
goni/o	angle	<i>goniometer</i>
gyr/o	circle, spiral	<i>gyrospasm</i>
holo-	entire, complete	<i>holoarthritis</i>
humer/o	humerus	<i>humeroradial</i>
hyps-	high	<i>hypsicephaly</i>
ili/o	ilium	<i>iliolumbar</i>
ischi/o	ischium	<i>ischiodynia</i>
ithy-	erect, straight	<i>ithylordosis</i>
kyph/o	humpback	<i>kyphoscoliosis</i>
lamin/o	lamina	<i>laminectomy</i>
lip/o	fat	<i>lipochondroma</i>
-listhesis	slipping	<i>spondylolisthesis</i>
lord/o	curvature, bending	<i>lordoscoliosis</i>
lox/o	oblique, slanting	<i>loxarthron</i>
lumb/o	loin	<i>lumbodynia</i>
maxill/o	maxilla	<i>maxillotomy</i>
mega-, megal-	large	<i>megalopodia</i>
-megaly	enlargement	<i>dactylomegaly</i>
mel/o	limb, limbs	<i>melalgia</i>
om/o	shoulder	<i>omodynia</i>
opisth/o	backward, behind	<i>opisthognathism</i>
oste/o	bone	<i>osteochondroma</i>
pan-	all	<i>panarthritis</i>
patell/o	patella	<i>patellofemoral</i>
ped/o	foot, child	<i>pedal</i>
pelv/i	pelvis	<i>pelvimeter</i>
perone/o	fibula	<i>peroneotibial</i>
petr/o	stone, petrous region of temporal bone	<i>petromastoid</i>
phalang/o	phalanges	<i>phalangitis</i>
-physis	growth, growing	<i>diaphysis</i>
pod/o	foot	<i>podiatrist</i>
-porosis	porous, decrease in density	<i>osteoporosis</i>
pub/o	pubis	<i>pubovesical</i>
rachi/o	spine	<i>rachioptegia</i>
sacr/o	sacrum	<i>sacrocoxalgia</i>
scapul/o	scapula	<i>scapulopexy</i>
scoli/o	crooked, twisted	<i>scoliorachitic</i>
skelet/o	skeleton	<i>skeletogenous</i>
spin/o	spinal cord, spine	<i>spinocerebellar</i>
spondyl/o	vertebrae	<i>spondylopyrosis</i>
stern/o	sternum	<i>sternocostal</i>
synov/o	synovia, synovial membrane	<i>synovectomy</i>
tal/o	talus	<i>talofibular</i>
tars/o	tarsus, edge of eyelid	<i>tarsoclasia</i>
tibi/o	tibia	<i>tibiotalar</i>
vertebr/o	vertebra	<i>vertebrosternal</i>
xiph/o	sword-shaped, xiphoid	<i>xiphocostal</i>

NERVOUS SYSTEM

A. Cells

1. Neuron – Dendrites, cell body, axon
2. Neuroglia (glial)

B. Central Nervous System (CNS)

1. Brain – Cerebrum, cerebellum, brainstem, diencephalon
2. Spinal cord – Ascending/descending tracts
3. Membranes (meninges) – Dura mater, arachnoid, pia mater
4. Cerebrospinal Fluid (CSF)

C. Peripheral Nervous System (PNS)

1. Cranial nerves (12 pairs)
2. Spinal nerves (31 pairs)
3. Afferent (sensory) division: sensory receptors
4. Efferent (motor) division
 - a. Somatic nervous system (voluntary)
 - b. Autonomic nervous system (involuntary)
 - i. Sympathetic nervous system
 - ii. Parasympathetic nervous system

TERMS	DEFINITIONS	WORDS
-algnesia, alges/o	pain sensitivity	analgesia
astr/o	star, star shaped	astrocytoma
atel/o	incomplete, imperfect	atelomyelia
-bulia, -boulia	will	abulia
cerebell/o	cerebellum	cerebellospinal
cerebr/o	cerebrum, brain	cerebroid
-crasia	mixture (good or bad), temperament	eucrasia
drom/o, -drome	running	dromotropic
encephal/o	brain	encephalomalacia
esthesia/o, -esthesia	sensation, feeling	esthesioneurosis
gangli/o, ganglion/o	ganglion	gangliocytoma
gli/o	glue, neuroglia	gliocyte
heli/o	sun	heliophobia
hydr/o	water, hydrogen	hydrocephalocele
hypn/o	sleep	hypnogenic
hypothalam/o	hypothalamus	hypothalamo-hypophyseal
keraun/o	lightning	keraunoneurosis
klept/o	theft, stealing	kleptomania
-lemma	confining membrane	epilemma
-lepsy	seizure	epilepsy
-lexia	speech, word	bradylexia
log/o, -log, -logue	word, speech, thought	logorrhea
-mania	madness, obsessive preoccupation	hypomania
medull/o	medulla, marrow	medulloblast
mening/o	meninges, membranes	meningocele
ment/o	mind	dementia
-mnesia	memory	ecmnesia
myel/o	bone marrow, spinal cord	myelocele
narc/o	numbness, stupor	narcoanesthesia
neur/o	nerve	neurotripsy
noci-	to cause harm, injury or pain	nociceptor
-noia	mind, will	paranoia
-paresis	partial paralysis	hemiparesis
phaner/o	visible, apparent	phaneromania
-phobia, phob/o	fear, aversion	phobophobia
phren/o	mind, diaphragm	tachyphrenia
picr/o	bitter	picrotoxin
piez/o, pies/i, -piesis	pressure	piesesthesia
-plegia	paralysis	quadriplegia

poli/o	gray (matter)	poliomyelitis
-pore	opening, passageway	neuropore
-praxia	action, activity	parapraxia
psych/o	mind	psychokinesis
psychr/o	cold	psychrophobia
radicul/o	nerve root	radiculitis
rhiz/o	root	rhizotomy
schiz/o	split, division	schizophrenia
somn/i, -somnia	sleep	insomnia
syring/o	tube, fistula	syringomyelocele
tauto-	identical, same	tautomeral
-taxia, tax/o	arrangement, coordination	dystaxia
tel/o	end	telodendron
tephr/o	gray (ashen)	tephromyelitis
thanat/o	death	thanatomania
thec/o	sheath	neurothecitis
vag/o	vagus nerve	vagolysis

MALE REPRODUCTIVE SYSTEM

A. Scrotum

Sac containing the testes

B. Testes

1. Seminiferous tubules - spermatozoa
2. Interstitial cells - testosterone

C. Ducts

1. Epididymis
2. Vas deferens/ductus deferens
3. Ejaculatory duct
4. Urethra

D. Penis

Erectile tissue

E. Glands

1. Seminal vesicles
2. Prostate gland
3. Bulbourethral (Cowper's) gland

F. Secretion

- Semen
1. Sperm
 2. Glandular secretions

TERMS	DEFINITIONS	WORDS
andr/o	male	androgen
balan/o	glans penis	balanoblenorrhoea
-cele	hernia, swelling	hydrocele
-cide	killing, agent which kills	spermicide
crypt/o	hidden, concealed	cryptorchism
epididym/o	epididymis	epididymectomy
genit/o	reproduction	genitourinary
gon/o	genitals	gonocyte
gonad/o	gonads	gonadogenesis
olig/o	scanty, few, little	oligospermia
orch/o, orchid/o	testis	orchidopexy
osche/o	scrotum	oscheoplasty
phall/o	penis	phallophobia
phim/o	muzzle	paraphimosis
prostat/o	prostate gland	prostaticostomy
semin/i	semen	seminiferous
sperm/o, spermat/o	spermatozoa	spermatogenesis
test/o, testicul/o	testis	testectomy
vas/o	vas deferens, vessel	vasovasostomy
venere/o	sexual intercourse	venereologist
vesicul/o	seminal vesicle	vasovesiculitis
zo/o	animal	azoospermia

URINARY SYSTEM

A. Organs

1. Kidneys - Cortex, medulla, nephron, collecting duct, renal pelvis

2. Ureters - Tubes
3. Bladder - Trigone
4. Urethra - Tube

B. Urine

1. Formation - Filtration, reabsorption, secretion
2. Composition - Water, nitrogenous waste, salts, other substances

TERMS	DEFINITIONS	WORDS
a-, an-	without, not	anuria
albumin/o	albumin	albuminometer
ammon/o	ammonium	ammonuria
-atresia	closure, occlusion	urethratresia
atreto-	closed, lacking an opening	atretocystia
azot/o	nitrogen, urea	azoturia
calci/o	calcium	hypocalciuria
cali/o	calyx	pyelocaliectasis
cupr/o	copper	cupruresis
cyan/o	blue	urocyanosis
cyst/o	bladder, cyst	cystogram
-ectasis, -ectasia	dilation, expansion	nephrectasia
fusc/o	dark brown	urofuscohematin
glomerul/o	glomerulus	glomerulopathy
keton/o	ketones	ketonuria
lith/o	stone, calculus	pyelolithotomy
neph/r/o	kidney	nephrotoxic
noct/i	night	noctalbuminuria
py/o	pus	pyocalix
pyel/o	renal pelvis	pyelophlebitis
ren/o	kidney	renogastric
uric/o	uric acid	uricosuria
ur/o	urine	uroerythrin
-uresis	urination	diuresis
ureter/o	ureter	ureterocolostomy
urethr/o	urethra	urethrorrhagia
-uria	urine condition	pyuria
urin/o	urine	urinalysis
vesic/o	urinary bladder	vesicoclysis

FEMALE REPRODUCTIVE SYSTEM

A. Ovaries

1. Oocyte development
2. Ovulation

B. Fallopian tubes/uterine tubes

Fertilization

C. Uterus

1. Wall
 - a. Perimetrium
 - b. Myometrium
 - c. Endometrium
2. Parts
 - a. Fundus
 - b. Body
 - c. Cervix

D. Vagina

Hymen

E. External genitalia/vulva

1. Labia majora/minora
2. Clitoris
3. Bartholin's glands

F. Breasts

1. Mammary glands
2. Nipple
3. Areola
4. Lactation

G. Menstrual cycle

1. Phases
2. Hormonal interaction
3. Cessation

TERMS	DEFINITIONS	WORDS
amni/o	amnion	amniocopy
cervic/o	neck, cervix	cervicovaginitis
chori/o	chorion	chorioadenoma
-clasis, -clast,	break, breaking	cranioclasia
-clasia		
colp/o	vagina	colporrhaphy
culd/o	cul-de-sac	culdoscopy
-cyesis	pregnancy	ovariocyesis
embryo/o	embryo	embryopathy
episi/o	vulva	episiostenosis
fet/o	fetus	fetography
galact/o	milk	galactacrasia
gravid/o	pregnancy	gravidocardiac
-gravida	pregnant woman	unigravida
gynec/o	woman, female	gynecography
helc/o	ulcer	helcomenia
hymen/o	hymen	hymenitis
hyster/o	uterus	panhysterectomy
lact/o	milk	lactorrhea
lecith/o	yolk, ovum	centrolecithal
-lipsis	omit, fail	menolipsis
mamm/o	breast	mammography
mast/o	breast	mastalgia
men/o	menses, menstruation	menorrhagia
metr/o	uterus	myometritis
nat/o	birth	neonatology
neo-	new	neonatal
nulli-	none	nulliparity
o/o	egg, ovum	oogenesis
obstetr/o	midwife	obstetrician
omphal/o	navel	omphalocele
oophor/o	ovary	oophorohysterectomy
ov/o, ov/i	egg, ovum	ovicide
ovari/o	ovary	ovariocentesis
-para, -parous	to bear, bring forth	septipara
-partum	childbirth, labor	postpartum
perine/o	perineum	colpoperineoplasty
per/o	deformed, maimed	peromelia
phys/o	air, gas	physometra
sacchar/o	sugar	saccharogalactorrhea
salping/o	fallopian tube	salpingocyesis
terat/o	monster	teratogenesis
thel/o	nipple	thelorrhagia
toc/o, -tocia	childbirth, labor	dystocia
tub/o	tube	tuboplasty
uter/o	uterus	uterolith
vagin/o	vagina	vaginography
viv/i	life, alive	viviparous
vulv/o	vulva	vulvopathy

CARDIOVASCULAR

A. Heart

- Four chambers
 - Two upper (atria)
 - Two lower (ventricles)
- Wall
 - Endocardium
 - Myocardium
 - Pericardium
- Two partitions
 - Interatrial septum
 - Interventricular septum
- Four valves
 - Atrioventricular
 - Tricuspid
 - Bicuspid (mitral)
 - Semilunar
 - Pulmonary
 - Aortic

B. Blood vessels

- Arteries - arterioles
- Veins - venules
- Capillaries

C. Circulation

- Pulmonary
- Systemic

D. Blood pressure

- Systole (contraction)
- Diastole (relaxation)

E. Pulse

Rhythmical expansion and contraction of an artery as a result of the heart contraction

F. Electrical/Conduction system

- Components - SA node - AV node - bundle of His - bundle branches - Purkinje fibers
- Measurement - EKG/ECG

TERMS	DEFINITIONS	WORDS
aneurysm/o	aneurysm	aneurysmectomy
angi/o	vessel	angioblast
aort/o	aorta	aortomalacia
arteri/o	artery	arteriolith
arteriol/o	arteriole	arteriole-sclerosis
ather/o	fatty substance, plaque	atheroma
atri/o	atrium	atrioseptopexy
brady-	slow	bradycardia
cardi/o	heart	cardiopsis
cine-	movement	cineangiograph
-clysis	irrigation, washing	venoclysis
coron/o	heart	coronary
embol/o	embolus	embolotomy
isch/o	suppress, restrain	ischemia
-megaly	enlargement	atriomegaly
mi/o	less, smaller	miocardia
-motor	movement, motion	venomotor
palpit/o, palpitat/o	flutter, throbbing	palpitation
phleb/o	vein	phleborrhexis
presby-rhe/o	aging, elderly flow, current, stream	presbycardia rheocardiography
-spasm	involuntary contraction	vasospasm
sphygm/o	pulse	sphygmoscope
-sphyxia	pulse	asphyxia
-stenosis	narrowed, constricted	aortostenosis
tachy-	fast	tachycardia
tel/e	end, distant	telecardiography
-tension	stretched, strained	hypertension
valv/o, valvul/o	valve	valvulotomy
varic/o	varicose veins	varicophlebitis
vas/o	vessel, vas deferens	vasohypotonic
vascul/o	vessel	vasculitis
ven/o	vein	venography
ventricul/o	ventricle of the heart or brain	ventriculogram
venul/o	venule	venular

GASTROINTESTINAL SYSTEM

A. Oral cavity

Tongue, teeth, hard/soft palate, gums, salivary glands

B. Pharynx

C. Esophagus

D. Stomach

- Sphincters
- Parts - fundus, body, pylorus

E. Small intestine

Parts - duodenum, jejunum, ileum

F. Liver

Right and left lobes

G. Pancreas

Endocrine/exocrine tissue

H. Large intestine

Parts - cecum, colon, rectum, anus

TERMS	DEFINITIONS	WORDS
abdomin/o	abdomen	abdomino-centesis
-agogue	producer, leader	cholagogue
-agra	severe pain	dentagra
amyl/o	starch	amylolysis
an/o	anus	anorectocolonic
arsenic/o	arsenic	arsenicophagy
atel/o	incomplete, imperfect	ateloglossia
bil/i	bile	biligenesis
bucc/o	cheek	buccal
cec/o	cecum	cecoileostomy
celi/o	abdomen	celiomyositis
cheil/o, chil/o	lip	cheiloschisis
-chezia, -chesia	defecation	dyschezia
chol/e	gall, bile	cholangiostomy
choledoch/o	common bile duct	choledocholithiasis
chyl/o	chyle	chylopoiesis
col/o	colon	proctocolectomy
dent/i	tooth	dentalgia
dips/o	thirst	adipsia
duoden/o	duodenum	duodenohepatic
-emesis	vomiting	hyperemesis
enter/o	intestines (small intestines)	enteroclysis
esophag/o	esophagus	esophagocele
gastr/o	stomach	dextrogastrica
ge/o	earth, soil	geophagia
gingiv/o	gums	gingivoplasty
gloss/o	tongue	glossolalia
gluc/o	glucose, sugar	glucokinetic
glyc/o	glucose, sugar	glycosialorrhea
hepat/o	liver	hepatosplenomegaly
idi/o	individual, distinct, unknown	idioglossia
ile/o	ileum	ileoileostomy
jejun/o	jejunum	jejunorrhaphy
lapar/o	abdomen, abdominal wall	laparoscope
lingu/o	tongue	retrolingual
loph/o	ridge	lophodont
odont/o	tooth	anodontia
or/o	mouth	intraoral
-orexia	appetite	hyperorexia
orth/o	straight, normal, correct	orthodontist
palat/o	palate	palatoplegia
-pepsia	digestion	dyspepsia
peritone/o	peritoneum	peritoneoclysis
phag/o, phagia	eating, ingestion	phagodnamometer
-posia	drinking	polyposia
-prandial	meal	postprandial
proct/o	rectum, anus	proctopexy
ptyal/o	saliva	ptyalogenic
pyl/e	portal vein	pylemphraxis
pylor/o	pylorus	pyloroplasty
pyr/o	heat, fire, fever	pyrosis
rect/o	rectum	rectocele
sial/o	saliva	sialolith
sigmoid/o	sigmoid colon	sigmoidoscope
sit/o	food	sitophobia
splanchn/o	viscera	splanchnoptosis
-stalis	contraction	peristalsis
staphyl/o	uvula, grapelike clusters	staphylorrhaphy
stomat/o	mouth	stomatomalacia
-tresia	opening, perforation	proctotresia
typh/o	cecum, blindness	typhlectasis
uran/o	palate	uranoschisis
zym/o	enzyme, ferment	zymolysis

BLOOD

A. Composition

1. Plasma (55%) - Pale, yellow fluid
2. Formed elements (cells) - 45%
 - a. Erythrocytes
 - b. Leukocytes
 - i. Granulocytes (eosinophils, basophils, neutrophils)
 - ii. Agranulocytes (monocytes, lymphocytes)
 - c. Thrombocytes (platelets)

B. Blood Groups

1. ABO Group
 - a. Types - A/B/AB/O
 - b. Determined by antigen(s) on erythrocyte
2. Rh Group
 - a. Rh+ / Rh-
 - b. Presence or absence of Rh antigen on erythrocyte

C. Blood Clotting (coagulation)

1. Chemical reactions
2. Clot prevention
3. Clot retraction

TERMS	DEFINITIONS	WORDS
agglutin/o	clumping	<i>agglutininophilic</i>
anis/o	unequal	<i>anisonormocytosis</i>
bas/o, basi/o	base, foundation	<i>basophil</i>
coagul/o	coagulation, clotting	<i>coagulopathy</i>
-crit	separate	<i>thrombocytocrit</i>
-emia	blood condition	<i>erythremia</i>
eosin/o	red, rosy, dawn	<i>eosinopenia</i>
erythr/o	red	<i>erythrocytosis</i>
ferr/i, ferr/o	iron	<i>ferrometer</i>
gigant/o	huge	<i>gigantocyte</i>
-globin	protein	<i>hemoglobin</i>
granul/o	granules	<i>agranulocytosis</i>
hem/o, hemat/o	blood	<i>hemocytotoxin</i>
kal/i	potassium	<i>hyperkalemia</i>
leuk/o	white	<i>leukocytotoxin</i>
myel/o	bone marrow, spinal cord	<i>myelocytosis</i>
natr/o	sodium	<i>hypernatremia</i>
neutr/o	neutral	<i>neutropenia</i>
norm/o	normal, usual	<i>normochromocyte</i>
-pheresis	removal	<i>plateletpheresis</i>
-phil, -philia	affinity for, tendency towards	<i>hemophilia</i>
-phore	bearer, processor	<i>siderophore</i>
-phoresis	bearing, transmission	<i>electrophoresis</i>
phosphat/o	phosphate	<i>phosphatemia</i>
poikil/o	variation, irregular	<i>poikiloblast</i>
pykn/o, pycn/o	thick, dense	<i>pyknotocyte</i>
rhod/o	red, rosy	<i>rhodocyte</i>
sangu/i, sanguin/o	blood	<i>sanguiferous</i>
sapr/o	rotten, decay	<i>sapremia</i>
schist/o, -schisis	split, cleft	<i>schistocyte</i>
ser/o	serum, serous	<i>serosanguineous</i>
sider/o	iron	<i>sideropenia</i>
spher/o	round, sphere	<i>spherocytosis</i>
strept/o	twisted, curved	<i>streptococcemia</i>
thromb/o	clot, thrombus	<i>thromboelastogram</i>
-volemia	blood volume	<i>normovolemia</i>

ENDOCRINE SYSTEM

A. Characteristics

1. Ductless glands called endocrine glands
2. Glands secrete hormones directly into the blood stream
3. Hormones affect growth/development, reproduction, metabolism

B. Endocrine Glands

1. Pituitary
 - a. anterior
 - b. posterior

2. Thyroid
3. Parathyroid
4. Adrenal
 - a. medulla
 - b. cortex
5. Pancreas
6. Testes
7. Ovaries
8. Pineal
9. Thymus

TERMS	DEFINITIONS	WORDS
acr/o	extremities	<i>acrogeria</i>
aden/o	gland	<i>adenectopia</i>
adren/o	adrenal glands	<i>adrenomegaly</i>
cortic/o	cortex	<i>corticoadrenal</i>
crin/o	secrete, separate	<i>crinogenic</i>
hirsut/o	hairy	<i>hirsutism</i>
hormon/o	hormone	<i>hormonopoiesis</i>
medull/o	medulla, marrow	<i>meduloadrenal</i>
myx/o	mucus	<i>myxedema</i>
pancreat/o	pancreas	<i>pancreatolithotomy</i>
parathyroid/o	parathyroid	<i>parathyroidoma</i>
phe/o	dusky	<i>pheochromoctoma</i>
pineal/o	pineal gland	<i>pinealopathy</i>
pituitar/o	pituitary gland	<i>pituitarism</i>
thym/o	thymus gland	<i>thymotoxin</i>
thyr/o	thyroid gland	<i>thyrocele</i>
tox/o, toxic/o	poison	<i>thyrotoxicosis</i>
-trophy, troph/o	nourishment, growth	<i>hypertrophy</i>

INTEGUMENTARY SYSTEM

A. Skin

- Layers
1. Epidermis
 2. Dermis/corium
 3. Subcutaneous/hypodermis

B. Hair

1. Components
 - a. Shaft
 - b. Root
 - c. Bulb
2. Cycle - Growth/resting

C. Glands

1. Sebaceous/oil - sebum
2. Sudoriferous/sweat
 - a. apocrine
 - b. eccrine

D. Nails

- Components
1. Free edge
 2. Nail body
 3. Nail root

TERMS	DEFINITIONS	WORDS
acanth/o	thorny, spiny	<i>acanthoma</i>
actin/o	ray, radiation	<i>actinodermatitis</i>
brom/o	bromine	<i>bromoderma</i>
	containing compound, odor	
caus/o, cauter/o	burn, burning	<i>causalgia</i>
-chroia	skin coloration	<i>xanthochroia</i>
chrom/o	color	<i>chromomycosis</i>
chrys/o	gold	<i>chrysiasis</i>
cutane/o	skin	<i>subcutaneous</i>
derm/o, dermat/o	skin	<i>dermatopathy</i>
erythem/o	flushed, redness	<i>erythema</i>
eschar/o	scab	<i>escharotomy</i>
graph/o	writing	<i>graphesthesia</i>
hidr/o	sweat	<i>hyperhidrosis</i>
ichthy/o	fish	<i>ichthyosis</i>
iod/o	iodine	<i>iododerm</i>
kerat/o	horny tissue, cornea	<i>keratolysis</i>

koil/o	hollow, concave, depressed	<i>koilonychia</i>
lepid/o	flakes, scales	<i>lepidosis</i>
lepr/o	leprosy	<i>leproma</i>
onych/o	nail	<i>onychomycosis</i>
pachy-	thick	<i>pachydermatocele</i>
papul/o	papule, pimple	<i>papulopustular</i>
perspir/o	breathe through	<i>perspiration</i>
phyt/o	plant	<i>phytophotodermatitis</i>
pil/o	hair	<i>pilomotor</i>
prurit/o	itching	<i>pruritogenic</i>
pseudo-	false	<i>pseudochromhidrosis</i>
psor/o	itching	<i>psoriasis</i>
py/o	pus	<i>pyodermatitis</i>
rhytid/o	wrinkle	<i>rhytidectomy</i>
seb/o	sebum	<i>seborrhea</i>
steat/o	fat	<i>steatocryptosis</i>
sud/o	sweat	<i>sudokeratosis</i>
trich/o	hair	<i>hypertrichosis</i>
ul/o	scar, scarring	<i>uloid</i>
ungu/o	nail	<i>subungual</i>
verruc/i	wart	<i>verrucosis</i>
xer/o	dry	<i>xeroderma</i>

RESPIRATORY SYSTEM

A. Upper Respiratory Tract

1. Nose - Nasal cavity, paranasal sinuses
2. Pharynx - Nasopharynx, oropharynx, laryngopharynx

B. Lower Respiratory Tract

1. Larynx - Vocal Cords
2. Trachea - C-shaped rings of cartilage
3. Bronchi
 - a. Right/left bronchus
 - b. Bronchioles - alveoli
4. Lungs
 - a. Lobes - right (3) / left (2)
 - b. Pleura

C. Pulmonary Ventilation

1. Inspiration/expiration
2. Diaphragm

TERMS	DEFINITIONS	WORDS
alveol/o	alveolus	<i>alveolitis</i>
aspir/o, aspirat/o	inhaling, removal	<i>aspiration</i>
blenn/o	mucus	<i>blennothorax</i>
brachy-	short	<i>brachypnea</i>
bronch/o	bronchus	<i>bronchorrhagia</i>
bronchiol/o	bronchiole	<i>bronchiolectasis</i>
-capnia, capn/o	carbon dioxide	<i>hypercapnia</i>
coni/o	dust	<i>coniofibrosis</i>
epiglott/o	epiglottis	<i>epiglottitis</i>
lal/o, -lalia	speech, babble	<i>laliatry</i>
lampr/o	clear	<i>lamprophonia</i>
laryng/o	larynx	<i>laryngoxerosis</i>
lept/o	slender, thin, delicate	<i>leptophonia</i>
lob/o	lobe	<i>lobectomy</i>
mediastin/o	mediastinum	<i>mediastinoscopy</i>
mogi-	difficult	<i>mogiphonia</i>
nas/o	nose	<i>nasolabial</i>
osm/o, -osmia	sense of smell, odor, impulse	<i>anosmia</i>
osphresi/o, -osphresia	sense of smell, odor	<i>osphresimeter</i>
ox/o, -oxia	oxygen	<i>hypoxia</i>
-pagus	conjoined twins	<i>thoracopagus</i>
pector/o	chest	<i>pectoralgia</i>
phas/o, -phasia	speech	<i>dysphasia</i>
phon/o, -phonia	voice, sound	<i>rhinophonia</i>
phren/o	mind, diaphragm	<i>phrenalgia</i>
pimel/o	fat, fatty	<i>pimelorthopnea</i>
pleur/o	pleura	<i>pleurochocystitis</i>
-pnea	breathe	<i>hyperpnea</i>

pneum/o	lung, air	<i>pneumopexy</i>
pneumon/o	lung, air	<i>pneumonomycosis</i>
-ptosis	prolapse, drooping	<i>laryngoptosis</i>
-ptysis	spitting	<i>hemoptysis</i>
pulmon/o	lung	<i>pulmonologist</i>
respir/o, respirat/o	breathe, breathing	<i>respirator</i>
rhin/o	nose	<i>rhinolithiasis</i>
sept/o	partition	<i>septorhinoplasty</i>
silic/o	silica, quartz	<i>silicosis</i>
sinus/o	cavity, sinus	<i>sinusotomy</i>
span/o	scanty, scarce	<i>spanopnea</i>
spir/o	breathe	<i>bronchospirometer</i>
steth/o	chest	<i>stethoscope</i>
therm/o	heat	<i>thermopolypnea</i>
thorac/o	chest	<i>thoracoschisis</i>
trache/o	trachea	<i>tracheostenosis</i>
traumat/o	trauma, injury, wound	<i>traumatopnea</i>
xen/o	strange, foreign	<i>xenophonia</i>

MUSCULAR SYSTEM

A. Characteristics

1. Excitability
2. Contractility
3. Elasticity
4. Extensibility

B. Types

1. Skeletal
 - a. Voluntary/striated
 - b. Movement
 - c. Naming
 - d. Attached to the skeleton
2. Smooth
 - a. Involuntary/nonstriated
 - b. Located in walls of hollow organs
3. Cardiac
 - a. Involuntary/striated
 - b. Found in the heart

TERMS	DEFINITIONS	WORDS
-asthenia, asthen/o	weakness	<i>myasthenia</i>
aux/o	growth, acceleration	<i>auxotonic</i>
-chalasia	relaxation	<i>achalasia</i>
erg/o	work	<i>ergometry</i>
fasci/o	fascia	<i>fasciodesis</i>
fibr/o	fiber, fibrous	<i>fibromyoma</i>
flex/o	bend	<i>flexor</i>
ide/o	idea, mental images	<i>ideomuscular</i>
kinesi/o, kinesia, -kinetic	movement	<i>kinesioneurosis</i>
lei/o	smooth	<i>leiomyoma</i>
ligament/o	ligament	<i>ligamentopexy</i>
-lysis	dissolution, breakdown	<i>myolysis</i>
muscul/o	muscle	<i>musculoskeletal</i>
my/o, myos/o	muscle	<i>myorrhexis</i>
pale/o	old	<i>paleokinetic</i>
palin-, pali-	recurrence, repetition	<i>palikinesia</i>
pyg/o	buttocks	<i>pygalgia</i>
rhabd/o	rod	<i>rhabdoid</i>
rhabdomy/o	striated/skeletal muscle	<i>rhabdomyolysis</i>
rot/o, rotat/o	turn, revolve	<i>rotator</i>
-stasis	standing still, standing	<i>myostasis</i>
sthen/o, -sthenia	strength	<i>sthenometry</i>
-stroma	supporting tissue of an organ	<i>myostroma</i>

syndesm/o	ligament, connective tissue	<i>syndesmectopia</i>
ten/o	tendon	<i>tenorrhaphy</i>
tenont/o	tendon	<i>tenontography</i>
-therapy, therapeut/o	treatment	<i>kinesiotherapy</i>
ton/o	tone, tension	<i>myatonia</i>

SPECIAL SENSES: EYE/EAR

A. Eye

1. Layers/Tunics
 - a. Fibrous
 - i. Sclera
 - ii. Cornea
 - b. Vascular
 - i. Choroid
 - ii. Ciliary body
 - iii. Iris
 - c. Nervous - Retina
2. Associated Structures
 - a. Eyebrows
 - b. Eyelids
 - c. Lacrimal apparatus
 - d. Conjunctiva
 - e. Eyelashes

B. Ear

1. External
 - a. Auricle
 - b. External auditory canal
 - c. Tympanic membrane/eardrum
2. Middle
 - a. Auditory/eustachian tube
 - b. Auditory ossicles - Malleus/incus/stapes
3. Inner
 - a. Bony labyrinth-semicircular canals/vestibule/cochlea

TERMS	DEFINITIONS	WORDS
acous/o	hearing	<i>acousia</i>
acoust/o	hearing, sound	<i>acoustics</i>
ambly/o	dim, dull	<i>amblyoscope</i>
audi/o, audit/o	hearing	<i>audiometer</i>
aur/o, auricul/o	ear	<i>auriculotemporal</i>
blephar/o	eyelid	<i>blepharorrhaphy</i>
cochle/o	cochlea	<i>cochleitis</i>
conjunctiv/o	conjunctiva	<i>conjunctivitis</i>
cor/o	pupil	<i>corectasia</i>
corne/o	cornea	<i>corneosclera</i>
-cusis	hearing	<i>presbycusis</i>
cycl/o	ciliary body, circular	<i>cyclodialysis</i>
dacry/o	tear	<i>dacryoadenectomy</i>
dipl/o	double	<i>diploscope</i>
hygr/o	moisture	<i>hygroblepharic</i>
ir/o, irid/o	iris	<i>iridemia</i>
kerat/o	cornea, horny tissue	<i>keratomalacia</i>
lacrim/o	tear, lacrimal duct	<i>lacrimotomy</i>
logad/o	whites of the eyes	<i>logadectomy</i>
myring/o	eardrum	<i>myringomycosis</i>
ocul/o	eye	<i>oculonasal</i>
ophthalm/o	eye	<i>ophthalmodynia</i>
ophry/o	eyebrow	<i>ophryitis</i>
-opia, -opsia	vision	<i>heteropsia</i>
opt/o	eye, vision	<i>optometer</i>
ot/o	ear	<i>otopyorrhea</i>
palpebr/o	eyelid	<i>palpebritis</i>
phac/o	lens	<i>phacocoele</i>
phak/o	lens	<i>phakoma</i>
phot/o	light	<i>photophobia</i>
platy-	broad, flat	<i>platycoria</i>

-pterygium	abnormality of the conjunctiva	<i>pimelopterygium</i>
pupill/o	pupil	<i>pupillatonia</i>
retin/o	retina	<i>retinotoxic</i>
scler/o	sclera	<i>sclerectasia</i>
scot/o	darkness	<i>scotopia</i>
son/o	sound	<i>sonometer</i>
staped/o	stapes	<i>stapedectomy</i>
stich/o, -stichia	rows	<i>polystichia</i>
stigmat/o	mark, point	<i>astigmatism</i>
-tropia	to turn	<i>anotropia</i>
tympan/o	eardrum	<i>tympanosclerosis</i>
uve/o	uvea	<i>uveoplasty</i>
vitre/o	glassy, vitreous body	<i>vitreocapsulitis</i>

LYMPHATIC & IMMUNE SYSTEM

A. Lymphatic System

1. Lymph
 - a. clear, watery fluid
 - b. formed from interstitial fluid
2. Lymphatic Vessels - Valves
3. Lymphatic Organs
 - a. Tonsils
 - i. palatine
 - ii. pharyngeal
 - iii. lingual
 - b. Lymph Nodes - concentration of nodes
 - i. inguinal
 - ii. axillary
 - iii. cervical
 - c. Spleen
 - d. Thymus

B. Immune System

1. Non-specific response - skin, inflammation, phagocytosis
2. Specific response
 - a. acquired immunity
 - i. natural (active/passive)
 - ii. artificial (active/passive)
 - b. antibody-mediated immunity
 - c. cell-mediated immunity

TERMS	DEFINITIONS	WORDS
adenoid/o	adenoids	<i>adenoidectomy</i>
allo-	other, different	<i>allotoxin</i>
auto-	self	<i>autoantitoxin</i>
axill/o	armpit	<i>axillary</i>
-edema	swelling	<i>lymphedema</i>
-emphraxis	stoppage, obstruction	<i>splenemphraxis</i>
immun/o	protection, immune	<i>immunogenic</i>
inguin/o	groin	<i>inguinodynia</i>
lien/o	spleen	<i>lienomalacia</i>
lymph/o	lymph	<i>lymphangio-phlebitis</i>
nod/o	knot	<i>nodular</i>
-penia	deficiency	<i>lymphocytopenia</i>
peri-	around	<i>perilymphangitis</i>
-phylaxis	protection	<i>anaphylaxis</i>
ple/o	more	<i>pleocytosis</i>
sarc/o	flesh	<i>lymphosarcoma</i>
-sepsis	putrefaction	<i>antiseptis</i>
splen/o	spleen	<i>splenectasis</i>
tetan/o	tetanus	<i>tetanophilic</i>
thym/o	thymus	<i>thymectomy</i>
tonsill/o	tonsils	<i>tonsillolith</i>
top/o	particular place or area	<i>splenectomy</i>
vaccin/o	vaccine	<i>vaccinogenous</i>

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NOTE TO STUDENT

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