

REVISION

Form singular / plural from given terms



- | | |
|------------------------------------|--------------------------------------|
| ➤ cornu minus | cornua minora |
| ➤ dentes molares superiores | dens molaris superior |
| ➤ contra dolorem acrem | contra dolores acres |
| ➤ symptoma morbi latentis | symptomata morborum latentium |
| ➤ segmenta anteriora bulborum | segmentum anterius bulbi |
| ➤ operatio post trauma gravissimum | operationes post traumata gravissima |
| ➤ fractura membri inferioris | fracturae membrorum inferiorum |
| ➤ amputationes digitorum minimorum | amputatio digiti minimi |
| ➤ ala major | alae majores |
| ➤ ante transfusionem necessariam | ante transfusiones necessarias |

Revision

Fill in missing endings



- Ramus inferior arteri...**ae**... gluta**e**... superior...**is**...
- Status post traum...**a**... grav...**e**...
- Infrarctus pariet...**is**... anterior...**is**... ventricul...**i**... cord...**is**... sinistr...**i**...
- In muscul...**o**... latissim...**o**... dors...**i**...
- Pulsus frequentissim...**us**... in febr...**i**... acut...**a**...
- Exitus post collaps...**um** circulation...**is**.. major...**is**..
- Laesio muscul...**i**... longissim...**i**... thorac...**is**..
- Doses medicament...**i**... minim...**ae**...
- Iniectio contra dolor...**em** magn...**um**
- Ulcus peptic...**um** chronic...**um** in curvatur...**a**... minor...**e**...

Numerals, Latin prefixes and suffixes



NUMERALS - INTRODUCTION



TYPES:

1. **CARDINAL** unus, una, unum
2. **ORDINAL** secundus, a, um ←
3. **MULTIPLE** triplex, cis ←
4. **NUMERAL ADVERBS** quater ←

ORDINAL NUMERALS



1-10	11-12
primus, a, um	undecimus , a, um
secundus, a, um	duodecimus , a, um
tertius, a, um	
quartus, a, um	
quintus, a, um	
sextus, a, um	
septimus, a, um	
octavus, a, um	
nonus, a, um	
decimus, a, um	

- denote the order in a sequence
- declined like paradigms *nervus, vena, septum*
- in the anatomical terminology, ordinals are used only up to 12

For use of numerals in anatomical terminology see handout Numerals.pdf.

MATCH NUMBERS AND LETTERS, FILL IN MISSING ENDINGS, READ THE NUMERALS



B

1. Vertebra cervical__ _ C₇

C

2. Fractura vertebra__ coccyge__ _ Co₃

3. Contusio vertebr__ __ __ lumbal__ __ __ L₁-L₅

D

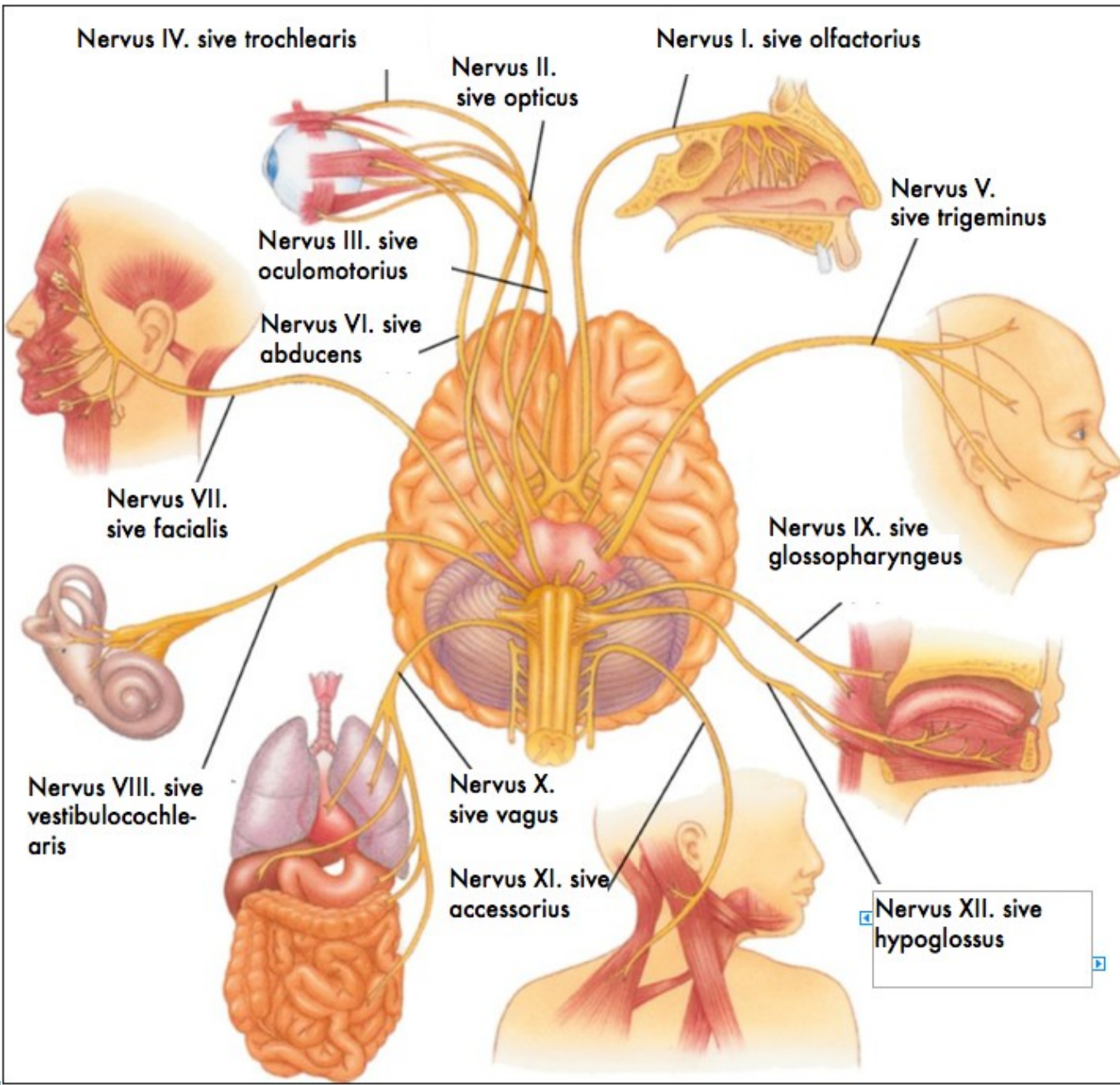
4. Vertebr__ _ sacral__ _ S₁-S₅

5. Operatio vertebr__ _ thoracic__ _ Th₈-Th₉

E

6. Columna vertebr__ _ __ _

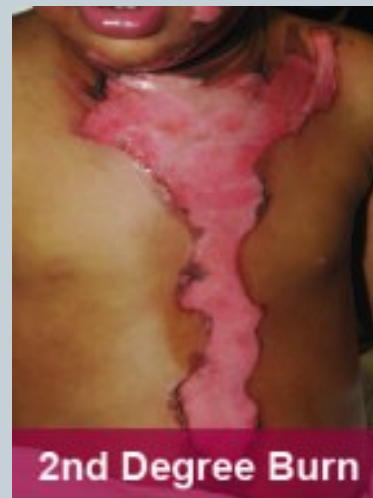
F



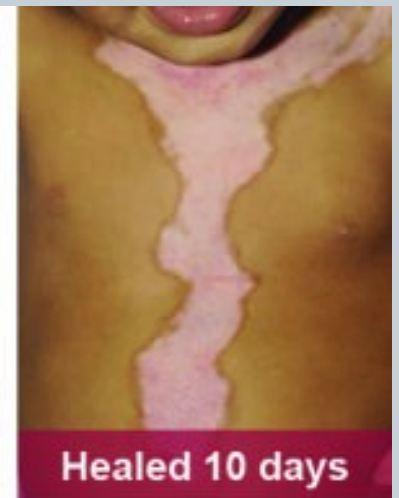
DEGREE



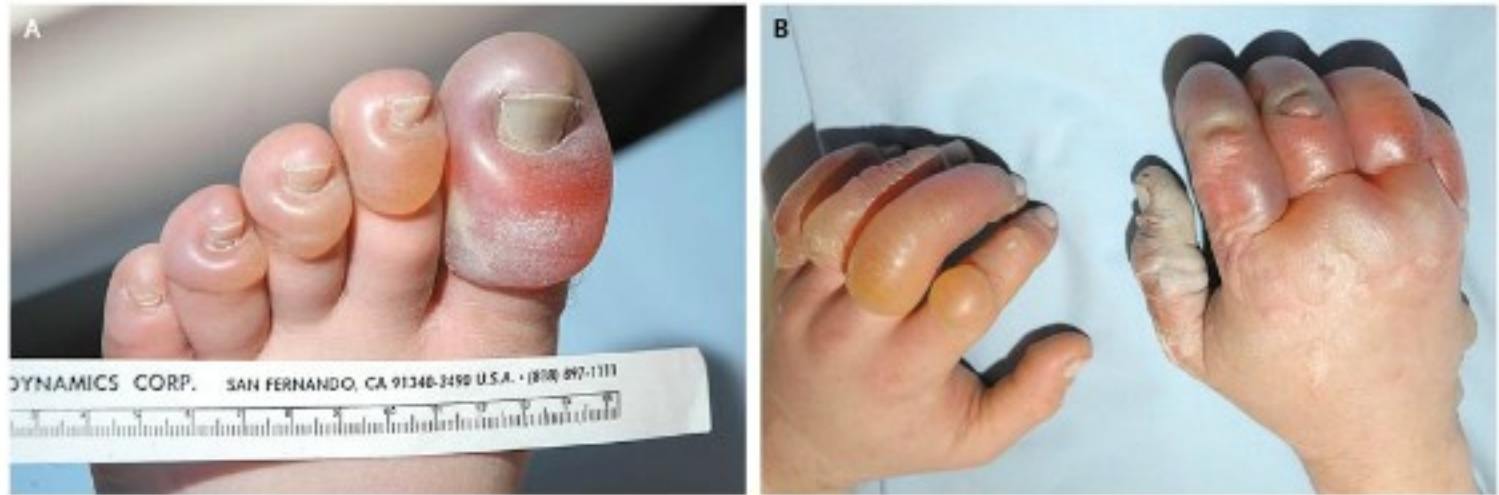
- using ordinal numerals, a degree of any injury or disease may be expressed
 - !the degree is always expressed in genitive form!
- eg. second degree burn wound of chest, neck and head
 - combustio thoracis, colli et capitis **gradus secundi**



2nd Degree Burn



Healed 10 days



A 39-year-old man was found in a snowbank, with the ambient Temperature 34 C. He had been reported missing the previous evening, after and argument with his girlfriend. The emergency services crew noticed the odor of alcohol in his breath. *Large, clear blisters* characteristic of severe frostbite were noted *on the hands and feet*. Of particular note were the *left great toe and right thumb with frostbite of the third grade*. Subsequently, the patient's *left great toe was amputated*.

blister = bulla, ae, f.

MULTIPLE 1-3 + MANY



1-3	many
Simplex, cis	Multiplex, cis
Duplex, cis	
Triplex, cis	

St. p. hysterectomiam abdominalem simplicem anno 2012/05

Pelvis renis l. dx. et ureter l. dx duplex

Tumor lobi superioris pulmonis l. sin. triplex

Metastases hepatis multiplices susp.

NUMERAL ADVERBS 1-4



1-4

semel

bis

ter

quater



Funiculus umbilicalis circum collum fetus semel/bis/ter in grav.

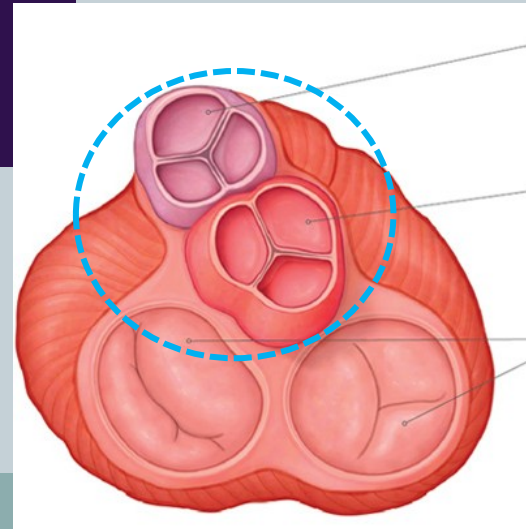
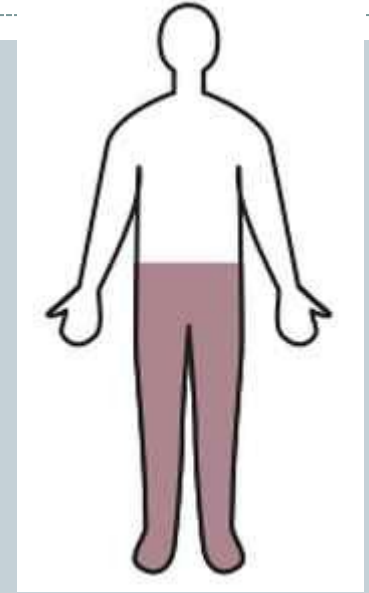
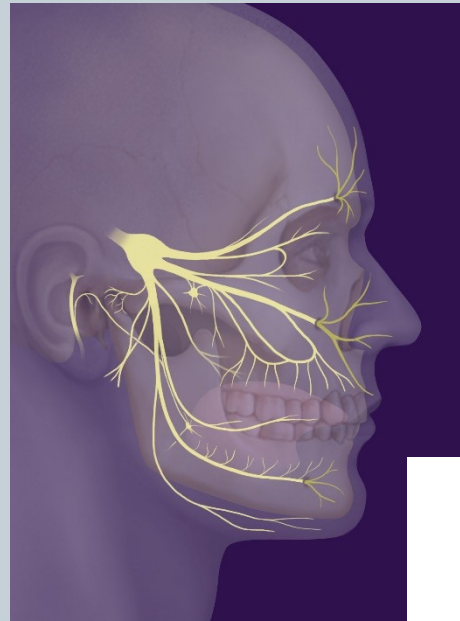
hebd. 40+4

COMPOUNDS WITH NUMERAL COMPONENTS



ENGLISH	LATIN	Example	GREEK	Example
one	uni-	<i>unilateralis</i> <i>unigravida</i>	mono-	<i>monoplegia</i>
first	primi-	<i>primipara</i> <i>primigravida</i>		
two	bi-	<i>biceps</i> <i>bilateralis</i>	di-	<i>diplegia</i>
second	secundi-	<i>secundigravida</i>		<i>tricephalus</i>
three	tri-	<i>triceps</i> <i>trigeminus</i>	tri-	<i>pars exocrina</i> <i>pancreatis</i>
four	quadri-	<i>quadriceps</i>	tetra-	<i>tetraplegia</i>
half	semi-	<i>semilunaris</i>	hemi-	<i>hemiplegia</i>
few			olig-o-	<i>oligodactylia</i>
many	mult-(i)-	<i>multangulus</i> <i>multicellularis</i>	poly-	<i>polydactylia</i> <i>polyarthritus</i>
all, whole			pan-	<i>panplegia</i> <i>pandemia</i>

?? diplegia – multangulus – trigeminus –
polydactylia – valvulae semilunares ??



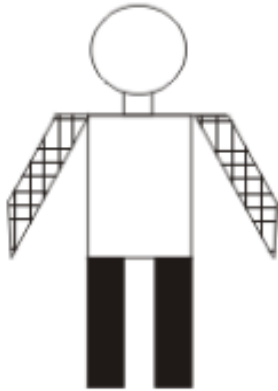
NAME WHAT KIND OF “-PLEGIA” IS ON THE PICTURE

1



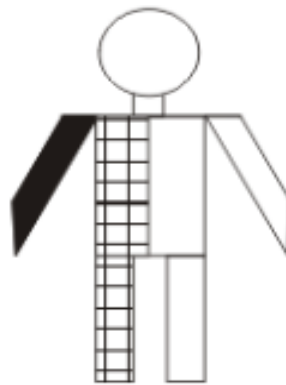
All four limbs are involved.

2



All four limbs are involved. Both legs are more severely affected than the arms.

3



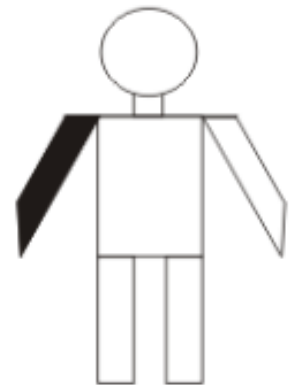
One side of the body is affected. The arm is usually more involved than the leg.

4



Three limbs are involved, usually both arms and a leg.

5



Only one limb is affected, usually an arm.

MONOPLÉGIA
TETRAPLEGIA

DIPLEGIA
HEMIPLEGIA

TRIPLEGIA
QUADRIPLÉGIA

BASED ON DEFINITIONS FORM TERMS WITH GREEK ELEMENTS

-PARESIS slight, partial
paralysis, muscle weakness

-PLEGIA stroke, total paralysis

1. Partial paralysis of a single limb or one part of the limb
2. Paralysis of a single extremity
3. Paralysis of corresponding parts on both sides of the body
4. Complete paralysis of the lower half of the body including both legs
5. A slight paralysis or weakness of both legs
6. Paralysis affecting only one side of the body
7. Paralysis of an upper and a lower extremity and of the face
8. Paralysis of all four limbs
9. Muscular weakness affecting all four extremities
10. Paralysis of the whole body
11. Weakness on one side of the body

HOW MANY PREGNANCIES, HOW MANY CHILDBIRTHS?



GRAVIDA

- number of pregnancies, regardless of result

PARA

- number of births after 20 weeks of pregnancy, regardless of result, stillbirth counted as 1, multiple births /twins et. al./ counted as 1

ABORTION

- miscarriage before 20 weeks of pregnancy

$G_8P_5A_3$

G_2P_2

$G_4P_3A_1$

-PARA AND -GRAVIDA



0	NULLI-PARA	NULLI-GRAVIDA
1	UNI/PRIMI-PARA	PRIMI-GRAVIDA
2	SECUNDI-PARA	SECUNDI-GRAVIDA
3	TERTI-PARA	TERTI-GRAVIDA
4	QUARTI/QUADRI-PARA	QUARTI-GRAVIDA
5	QUINTI-PARA	QUINTI-GRAVIDA
6	SEXTI-PARA	SEXTI-GRAVIDA
7	SEPTI-PARA	SEPTI-GRAVIDA
8	OCTI-PARA	OCTI-GRAVIDA
9	NONI-PARA	NONI-GRAVIDA
10	DECI-PARA	DECI-GRAVIDA
MANY	MULTI/PLURI-PARA	MULTI/PLURI-GRAVIDA



23 years old woman (gravida 1, para 0) was admitted at 40+1 weeks gestation and underwent an *emergency caesarian section* due to *imminent hypoxia of the fetus*. As revealed during the section the *umbilical cord was twisted twice around the neck of the neonate*, furthermore the *umbilical cord* was noted to *have a compound knot*. Compound knots, as in this case, are rare.

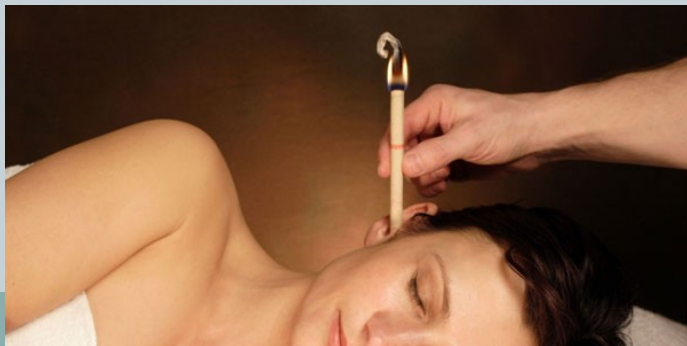
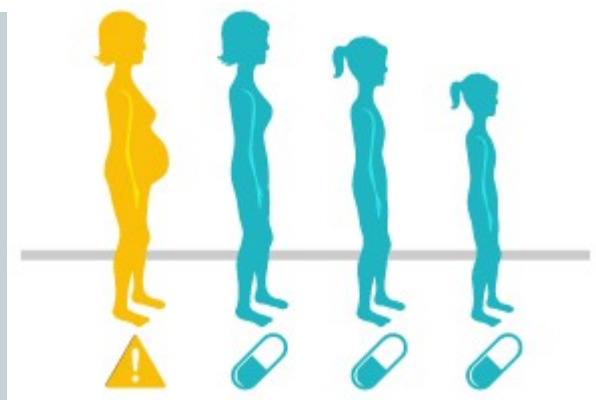
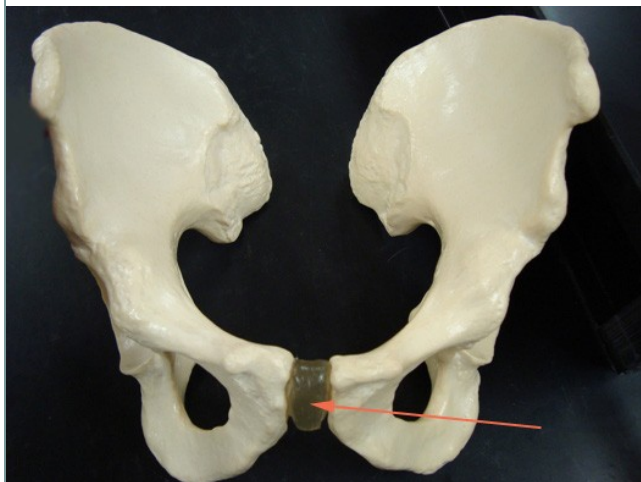
hypoxia, ae, f. =a diminished availability of oxygen to the body tissues

LATIN AND GREEK PREFIXES



LATIN	Example	GREEK	Example
contra-	<i>contraindicatio</i>	ant-, anti-	<i>antibioticum, antipyreticum</i>
cum- (con-, com-, col-, cor)	<i>congenitus</i> <i>commotio</i>	syn-, sym-	<i>symphysis, syndroma</i>
de- (des-)	1) <i>descendens</i> 2) <i>desinfectio, deformatio</i>	1) cata- 2) Ø	<i>catarrhus</i> <i>Ø</i>
dis- (dif-, di-)	1) <i>dislocatio</i> 2) <i>dissimilis</i>	1) dia-, di-, ana- 2) a-, an-	<i>diagnosis, analysis</i> <i>atrophia, anaesthesia</i>
e-, ex- (ef-)	<i>exsanguinatio</i>	ec-	<i>ectopia</i>
in- (im-, il-, ir-)	<i>immaturus</i>	a-, an-	<i>atrophia, anaesthesia</i>
post-	<i>posttraumaticus</i>	met-, meta-	<i>metastasis, metabolismus</i>
re-	<i>reinfectio</i>	ana-	<i>anamnesis, anabiosis</i>

?? contraindicatio – ectopia – cattarhus – atrophia –
anamnesis – symphysis ???



LATIN AND GREEK PREFIXES



LATIN	<i>Example</i>	GREEK	<i>Example</i>
per-	1) <i>peracutus, peraciditas</i> 2) <i>perforatus</i>	1) hyper- 2) dia	<i>hypertonia, hypertrophia</i> <i>diencephalon, diameter</i>
sub- (suc-, suf-, sup-, sus-)	<i>subfebrilis, subluxatio</i> <i>subcutaneus</i>	hyp-, hypo-	<i>hypotrophia, hypotonia</i> <i>hypophysis, hypoglossus</i>
Ø		dys-	<i>dystrophia, dyspepsia</i>
Ø		eu-	<i>eutrophia, euthanasia</i>

BASED ON DEFINITIONS MATCH GREEK PREFIXES WITH A GREEK ELEMENT

EU- HYPER-  A- DYS- HYPO-

-TROPHIA

EU-

- state of normal nourishment and growth

DYS-

- progressive changes that may result from defective nutrition of a tissue or organ

HYPER-

- general increase in bulk of a part or organ, not due to tumor formation

HYPO-

- progressive degeneration of an organ or tissue caused by loss of cells.

A-

- a wasting away of the body or of an organ or part, as from defective nutrition or nerve damage.

LATIN NOUN AND ADJECTIVE SUFFIXES



<i>Noun ending</i>	<i>Meaning</i>	<i>Example</i>
-io	act of, result of, process of	<i>commotio, inflammatio, laesio, transfusio</i>
-tor, -sor, -xor	agent	<i>levator, extensor, flexor</i>
-ura	act or result of an action	<i>sutura, fisura, incisura</i>
-itas	quality, state	<i>obesitas, surditas, mutitas</i>
-mentum	instrument, tool	<i>ligamentum, medicamentum</i>

<i>Adjective ending</i>	<i>Meaning</i>	<i>Example</i>
-alis, e / -aris, e / -inus, a, um / -eus, a, um / -aneus, a, um	relation	<i>nasalis; cochlearis; uterinus; cartilagineus; cutaneus</i>
-osus, a, um	full of	<i>ulcerosus, venosus, periculosus</i>
-atus, a, um	equipped with	<i>dentatus, caudatus</i>
-bilis, e	possibility, ability	<i>operabilis</i>
-ilis, e	having the quality	<i>fragilis</i>

NAME THE ACTION PERFORMED BY THE GIVEN MUSCLE

Musculus abductor pollicis longus	>> abductio, onis, f.
Musculus adductor hallucis longus	Adductio, onis, f.
Musculus compressor urethrae	Compressio, onis, f.
Musculus constrictor pharyngis medius	Constrictio, onis, f.
Musculus depressor anguli oris	Depressio, onis, f.
Musculus dilatator pupillae	Dilatatio, onis, f.
Musculus extensor carpi	Extensio, onis, f.
Musculus flexor digitorum profundus	Flexio, onis, f.
Musculus levator glandulae thyr(e)oideae	Levatio, onis, f.
Musculi rotatores thoracis	Rotatio, onis, f.
Musculus tensor fasciae latae	Tensio, onis, f.

NAME DEFECTS OF SENSES



surdomutitas, atis, f.



caecitas, atis, f.



surditas, atis, f.



mutitas, atis, f.

FILL IN THE CHART WITH TERMS DERIVED FROM GIVEN ROOTS



BASIC WORD	DESCRIPTION	DERIVED TERM
brain cerebrum, i, n. encephalon, i, n.	related to brain	cerebralis
	small brain	cerebellum
	related to the small brain	cerebellaris
	inflammation of the brain	encephalitis
liver hepar, atis, n.	related to liver	hepaticus
	inflammation of liver	hepatitis
	cancerous tumour in liver	hepatoma
	degenerative disease of liver	hepatosis
thorn spina, ae, f.	related to the thorn/spine	spinalis
	full of thorns	spinosus
	provided with thorns	spinatus
		supraspinalis

FILL LATIN / GREEK PARALLEL PREFIXES. DERIVE LATIN TERMS USING FILLED PREFIXES



PARALLEL GREEK / LATIN PREFIX	ENGLISH DESCRIPTION	DERIVED LATIN TERM
pro- ⇒ ante-	forearm	antebrachium
endo- ⇒ intra-	inside the vein (adj. e.g. injection)	intravenosus
dia- ⇒ trans-	a process of transferring blood from a donor to a recipient	transfusio
circum- ⇒ peri-	a double-wall sac around the heart	pericardium
epi- ⇒ super-	being on the surface, opposite of profound	superficialis
peri- ⇒ circum-	located around the mouth	circumoralis
ecto- ⇒ extra-	outside the uterus	extrauterinus
meta- ⇒ post-	after the operation (e.g. state, condition)	postoperativus
hyper- ⇒ supra-	located above the kidney	suprarenalis
inter- ⇒ dia-	sheet of muscle separating the thorax from the abdomen	diaphragma