

Basic Medical Terminology



SEMINAR 2

Pronunciation practice



- Infarctus myocardii recens
- Fractura comminutiva colli femoris lateris dextri
- Commotio cerebri
- Vulnus punctum thoracis ad pulmonem lateris sinistri penetrans
- Aethylismus chronicus
- Appendicitis acuta
- Intoxicatio carboneo hydroxydato (CO) gradus maioris

Pronunciation practice



- Typhus recurrens
- Tonsillitis purulenta recidivans
- Diabetes mellitus stabilis
- Dermatitis allergica protrahens
- Vitium cordis acquisitum
- Infarctus haemispherii sinistri cerebri, Hemiparesis
- Nephrolithiasis, colica renalis subsequens
- Tumor ventriculi ad investigationem et observationem

Revision: Latin declensions



- How do I decide to what declension a Latin noun belongs?
 - on the basis of the ending of genitive singular
- What are the genitive endings of Latin declensions?

DECLENSION	1 st	2 nd	3 rd	4 th	5 th
GENITIVE ENDING	-ae (-es)	-i	-(?)-is	-us	-ei
EXAMPLE	coxa, ae, f.	humerus, i, m. cranium, ii, n.	coccyx, gis, f. dens, dentis, m. femur, oris, n. pelvis, is, f.	arcus, us, m. genu, us, n.	facies, ei, f.

Revision: Latin declensions



- What is the stem of a Latin word?
 - a form to which individual case endings are attached
 - a part of the word which remains after the removal of the ending of genitive singular
- How can we identify the stem of a Latin noun?
 - we take the genitive form (sg.) and remove the genitive ending
 - ✦ vena, ven-ae
 - ✦ musculus, muscul-i; diameter, diametr-i
 - ✦ auris, aur-is; corpus, corpor-is
 - ✦ arcus, arc-us; genu, gen-us
 - ✦ facies, faci-ei

Practice: give the declensions of the nouns (cf. Handout 2, task 2)



0. corpus, oris, n.	3	13.,18. digitus, i, m.	2	27. hypogastrium, ii, n.	2
cutis, is, f.	3			29. truncus, i, m.	2
1. canut. itis. n.	3	14. sulcus, i, m.	2	30. manus, us, f.	4
	2	15.,28. penis, is m.	3	31. crus, cruris, n.	3
3. facies, ei, f.	5	16. femur, oris, n.	3	32. tarsus, i, m.	2
4. os, oris, n.	3	17. genu, us, n.	4	talus, i, m.	2
lingua, ae, f.	1	19. frons, frontis, f.	3	33. pes, pedis, m.	3
				34. hallux, ucis, m.	3
5. mentum, i, n.	2	20. oculus, i, m.	2		
6. axilla, ae, f.	1	21. nasus, i, m.	2		
7. brachium, ii, n.	2	22. auris, is, f.	3		
8. cubitus, i, m.	2	23. bucca, ae, f.	1		
9. antebrachium, ii, n.	2	24. collum, i, n.	2		
		cervix, icis, f.	3		
10. carpus, i, m.	2	25. pectus, oris, n.	3		
11. pollex, icis, m.	3	26. abdomen, inis, n.	3		
12. palma, ae, f.	1				

Practice: find the stems of the nouns (cf. Handout 2, task 3)



ex: caput, capit-is

- skeleton, skeleti
- os, ossis
- cranium, cranii
- orbita, orbitae
- collum, colli
- cervix, cervicis
- thorax, thoracis
- costa, costae
- discus, disci
- processus, processus
- vertebra, vertebrae
- pelvis, pelvis
- coxa, coxae
- ilia, ilium
- coccyx, coccygis
- ischium, ischii
- pubes, pubis
- symphysis, symphysis
- nasus, nasi
- dens, dentis
- mandibula, mandibulae
- clavicula, claviculae
- scapula, scapulae
- sternum, sterni
- humerus, humeri
- arcus, arcus
- radius, radii
- ulna, ulnae
- metacarpus, metacarpi
- carpus, carpi
- phalanx, phalangis
- femur, femoris
- patella, patellae
- tibia, tibiae
- fibula, fibulae
- metatarsus, metatarsi

Revision: Gender



- The grammatical gender of a noun **affects the form of all other words** related to it (i.e. adjectives, pronouns, verbs).
>> Latin **adjectives change** their forms **depending on the noun** to which they refer.
- ENGLISH – 3 genders:
 - HE – refers to male humans and animals
 - SHE – refers to female humans and animals
 - IT – inanimate objects or animals
- LATIN – 3 genders:
 - masculine -> discipulus (he-student), musculus (muscle)
 - feminine -> discipula (she-student), vena (vein)
 - neuter -> corpus (body)

Revision: number and case



LATIN = INFLECTIONAL LANGUAGE

- In many languages, Latin and Greek among them, nouns **decline** = **inflect** (change their form) for number and case.
 - Inflection for **number** involves *singular* (sg.) : *plural* (pl.) forms (eg. *forearm* : *forearms* = *antebrachium* : *antebrachia*) and is present in English as well.
 - Inflection for **case** involves changing the form of the noun according to its syntactic function/meaning. Latin has an extensive case system in which a special form is used for every specific meaning. In medical terminology, 4 out of 6 Latin cases are used to express the following meanings:

Revision: cases and their functions



LATIN

system of specific case endings + prepositions

1. **NOMINATIVE** – subject (ending)
2. **GENITIVE** – dependency of two nouns, possession (ending)
4. **ACCUSATIVE** – object, movement = direction (preposition + ending)
6. **ABLATIVE** – place, location, instrument, cause (preposition + ending)

ENGLISH

word order + prepositions

- > subject of a phrase
- > possessive case = “of”
- > prepositional phrase
- > prepositional phrase

Accusative + ablative = prepositional cases
(i.e. they are used only after prepositions).

Nominative singular and plural



Declens.		I.			II.				III.					IV.		V.
Paradigm		vena	<i>systole</i>	<i>diabetes</i>	nervus	septum	<i>nephros</i>	<i>colon</i>	dolor	corpus	pelvis	<i>dosis</i> febris	rete	ductus	genu	facies
Gender		f.	f.	m.	m.	n.	m.	n.	m. + f.	n.	m. + f.	m. + f.	n.	m.	n.	f.
S i n g u l a r	1.															
	2.	-ae	-es	-ae	-i	-i	-i	-i	-is	-is	-is	-is/-eos	-is	-us	-us	-ei
	4.	-am	-en	-am	-um	1	-on	1	-em	1	-em	-im/-in	1	-um	1	-em
	6.	-a	-e	-a	-o	-o	-o	-o	-e	-e	-e	-i	-i	-u	-u	-e
P l u r a l	1.															
	2.	-arum	-arum	-arum	-orum	-orum	-orum	-orum	-um	-um	-ium	-ium	-ium	-uum	-uum	-erum
	4.	-as	-as	-as	-os	1	-os	1	-es	1	-es	-es	1	-us	1	-es
	6.	-is	-is	-is	-is	-is	-is	-is	-ibus	-ibus	-ibus	-ibus	-ibus	-ibus	-ibus	-ebus
		+ Adj. of 1st decl. F			+ Adj. of 2nd decl. M	+ Adj. of 2nd decl. N			+Com- parative forms M+F	+Com- parative forms N	+ Adj. of 3rd decl. M + F		+ Adj. of 3rd decl. N			

Change the following words into plural (cf. Handout 2, task 4)



coxa _ _ coxae _ _ _

I

cox-

coxae

cervix _ _ cervicis _ _

III

cervic-

cervices

mentum _ _ menti _ _

II

ment-

menta

arcus _ _ arcus _ _

IV

arc-

arcus

Introduction to Latin syntax



AGREED ATTRIBUTE

= **noun** + **adjective** (agreement in gender, number and case)

Example: musculus (m.) long**us** = long muscle

fractura (f.) ap**er**ta = open fracture

caput (n.) long**um** = long head

NON-AGREED ATTRIBUTE

= **noun in nominative** + **noun in genitive**

○ **Meaning:** state of dependency, possession

○ **Translation:** “*of*”

Example: fractura cost**ae** // fracturae cost**arum**

fracture of a rib fractures of ribs

! = rib fracture = rib fractures

Genitive singular and plural



Declens.		I.			II.				III.					IV.		V.
Paradigm		vena	<i>systole</i>	<i>diabetes</i>	nervus	septum	<i>nephros</i>	<i>colon</i>	dolor	corpus	pelvis	<i>dosis febris</i>	rete	ductus	genu	facies
Gender		f.	f.	m.	m.	n.	m.	n.	m. + f.	n.	m. + f.	m. + f.	n.	m.	n.	f.
Singular	1.	-a	-e	-es	-us/-er	-um	-os	-on	?	?	-is/-es	-(s)is/ -xis/-osis	-ar/-e/ -al	-us	-u	-es
	2.															
	4.	-am	-en	-am	-um	1	-on	1	-em	1	-em	-im/-in	1	-um	1	-em
	6.	-a	-e	-a	-o	-o	-o	-o	-e	-e	-e	-i	-i	-u	-u	-e
Plural	1.	-ae	-ae	-ae	-i	-a	-i	-a	-es	-a	-es	-es	-ia	-us	-ua	-es
	2.															
	4.	-as	-as	-as	-os	1	-os	1	-es	1	-es	-es	1	-us	1	-es
	6.	-is	-is	-is	-is	-is	-is	-is	-ibus	-ibus	-ibus	-ibus	-ibus	-ibus	-ibus	-ebus
		+ Adj. of 1st decl. F			+ Adj. of 2nd decl. M	+ Adj. of 2nd decl. N			+Com- parative forms M+F	+Com- parative forms N	+ Adj. of 3rd decl. M + F		+ Adj. of 3rd decl. N			

Form non-agreed attributes (cf. Handout 2, task 5)



ex: caput + costa > caput costae *head of a rib*

caput + femur -> caput **femoris**

caput + fibula -> caput **fibulae**

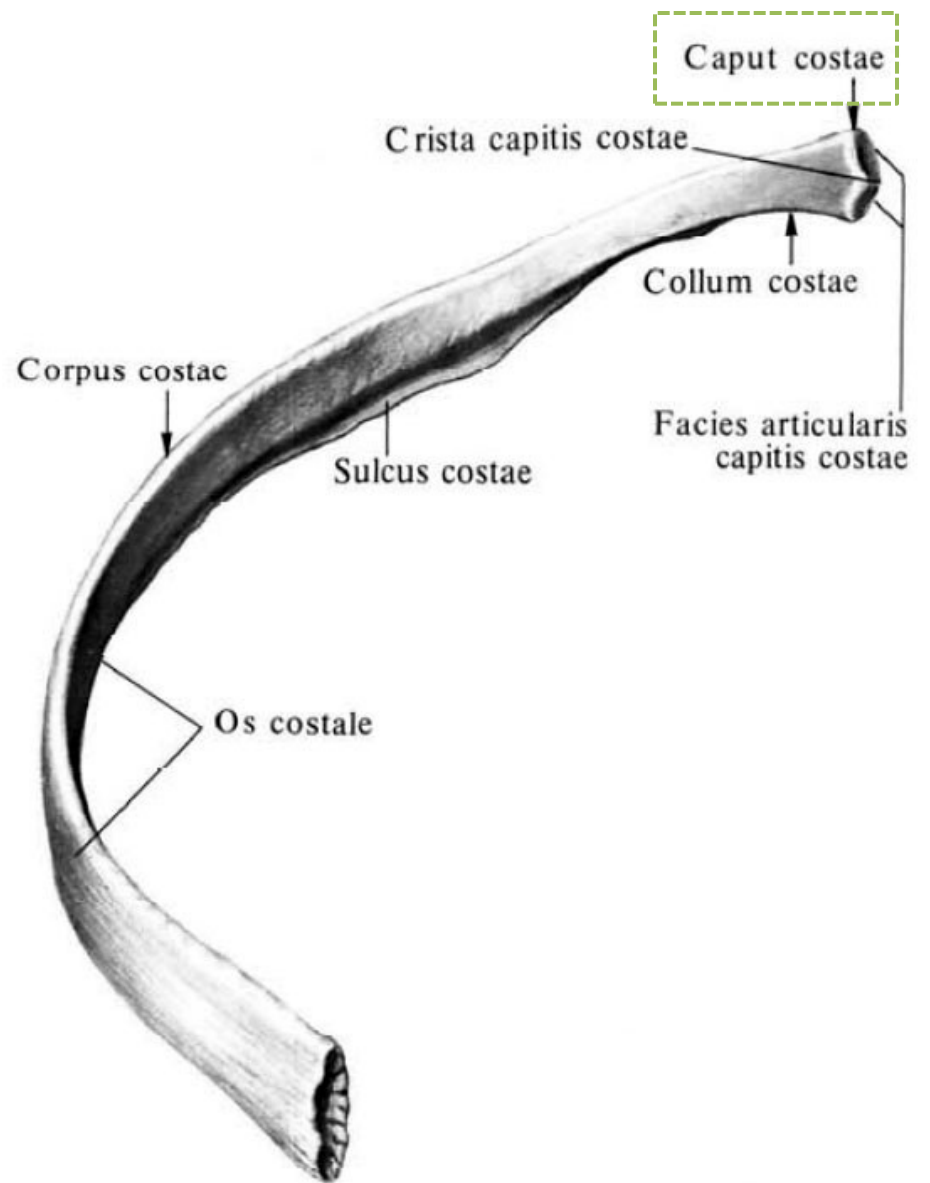
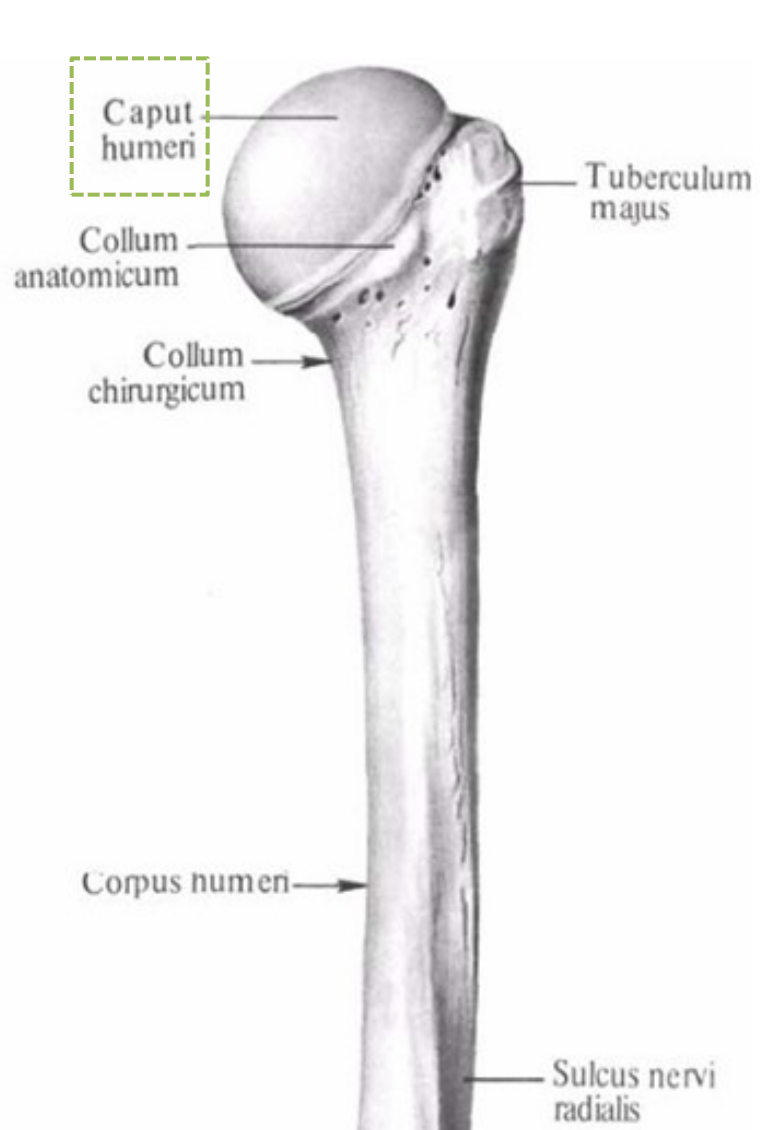
caput + humerus -> caput **humeri**

caput + phalanx -> caput **phalangis**

caput + radius -> caput **radii**

caput + talus -> caput **tali**

caput + ulna -> caput **ulnae**



Prepositions and prepositional phrases



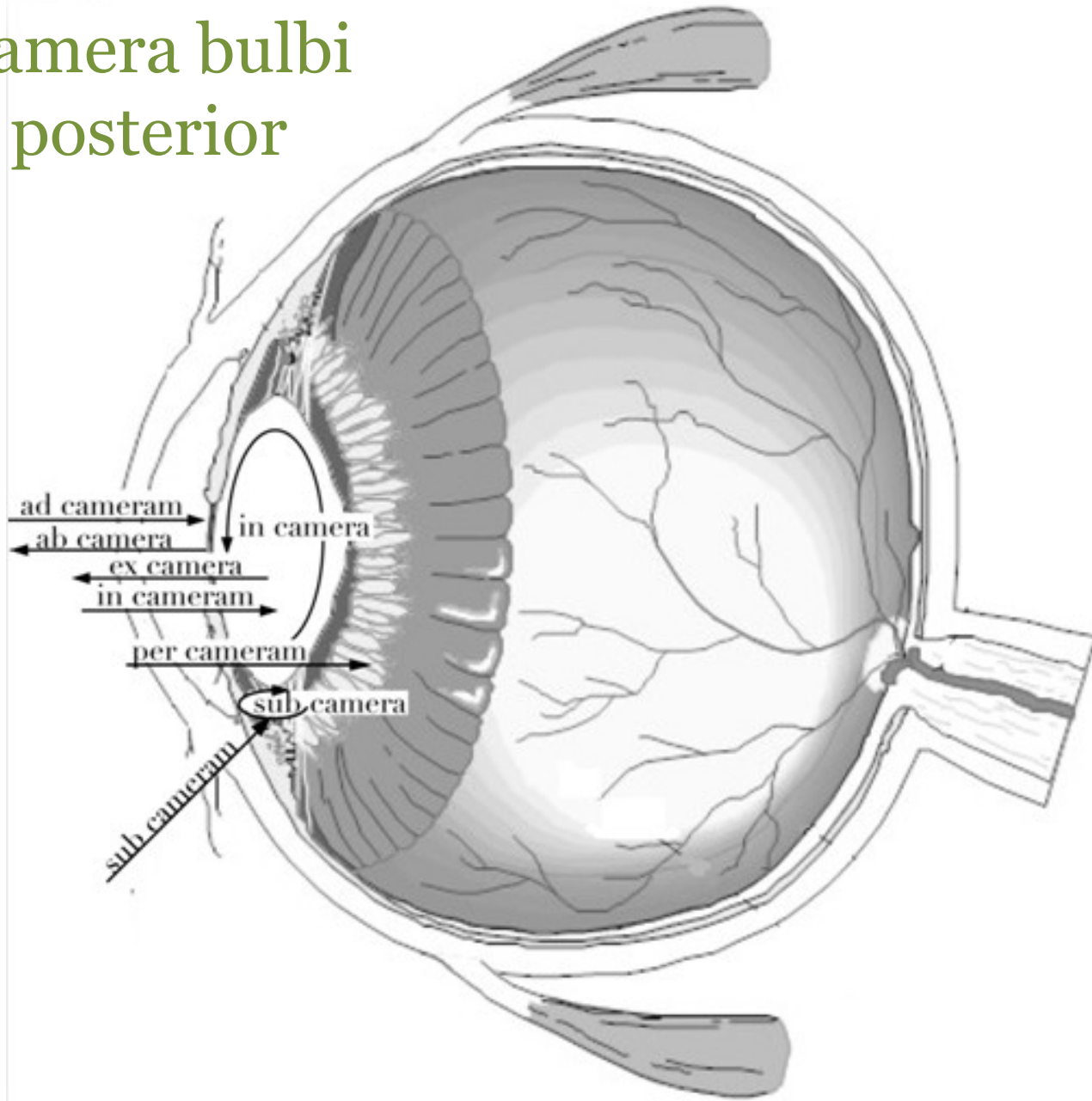
- Denote:
 - spatial relations *sub, infra, post*
 - temporal relations *post, ante*
 - causal relations *propter, e/ex*
 - other *cum, sine*
- Can be connected with:
 - Accusative case
(majority of prepositions used in medical terminology)
 - Ablative case (**A/AB, CUM, DE, E/EX, PRO, SINE**)
 - both Accusative and Ablative case = **IN, SUB**

Accusative and ablative singular and plural



Declens.		I.			II.				III.					IV.		V.
Paradigm		vena	<i>systole</i>	<i>diabetes</i>	nervus	septum	<i>nephros</i>	<i>colon</i>	dolor	corpus	pelvis	<i>dosis</i> febris	rete	ductus	genu	facies
Gender		f.	f.	m.	m.	n.	m.	n.	m. + f.	n.	m. + f.	m. + f.	n.	m.	n.	f.
S i n g u l a r	1.	-a	-e	-es	-us/-er	-um	-os	-on	?	?	-is/-es	-(s)is/ -xis/-osis	-ar/-e/ -al	-us	-u	-es
	2.	-ae	-es	-ae	-i	-i	-i	-i	-is	-is	-is	-is/-eos	-is	-us	-us	-ei
	4.															
	6.															
P l u r a l	1.	-ae	-ae	-ae	-i	-a	-i	-a	-es	-a	-es	-es	-ia	-us	-ua	-es
	2.	-arum	-arum	-arum	-orum	-orum	-orum	-orum	-um	-um	-ium	-ium	-ium	-uum	-uum	-erum
	4.															
	6.															
		+ Adj. of 1st decl. F			+ Adj. of 2nd decl. M	+ Adj. of 2nd decl. N			+Com- parative forms M+F	+Com- parative forms N	+ Adj. ▼ of 3rd decl. M + F		+ Adj. of 3rd decl. N			

Camera bulbi posterior



Connect nouns with prepositions (cf. Handout 2, task 6)



sub + Abl. (where?) under	shoulder blade	skin	tongue
	<i>sub scapula</i>	<i>sub cute</i>	<i>sub lingua</i>
sub + Acc. (where to?) under	eye	rib	kneecap
	<i>sub oculum</i>	<i>sub costam</i>	<i>sub patellam</i>
in + Abl. (where?) in, at	tooth	mouth	bone
	<i>in dente</i>	<i>in ore</i>	<i>in osse</i>
in + Acc. (where to?) to	skull	orbit	hypogastrium
	<i>in cranium</i>	<i>in orbitam</i>	<i>in hypogastrium</i>

1st declension (a-stems): Latin nouns



- Latin nouns belonging to the 1st declension have:

Genitive sg. ending	-AE
Nominative sg. ending	-A
Gender	Mostly F Never N Exceptions M

Nouns of the 1st declension of MASCULINE GENDER:

- Names of specialists – e.g. dentista, ae, m.
- Names of muscles – e.g. agonista, ae, m.

1st declension: Latin nouns



Declens.		I.			II.				III.					IV.		V.
Paradigm		vena	systole	diabetes	nervus	septum	nephros	colon	dolor	corpus	pelvis	dosis febris	rete	ductus	genu	facies
Gender			f.	m.	m.	n.	m.	n.	m. + f.	n.	m. + f.	m. + f.	n.	m.	n.	f.
S i n g u l a r	1.		-e	-es	-us/-er	-um	-os	-on	?	?	-is/-es	-(s)is/ -xis/-osis	-ar/-e/ -al	-us	-u	-es
	2.		-es	-ae	-i	-i	-i	-i	-is	-is	-is	-is/-eos	-is	-us	-us	-ei
	4.		-en	-am	-um	1	-on	1	-em	1	-em	-im/-in	1	-um	1	-em
	6.		-e	-a	-o	-o	-o	-o	-e	-e	-e	-i	-i	-u	-u	-e
P l u r a l	1.		-ae	-ae	-i	-a	-i	-a	-es	-a	-es	-es	-ia	-us	-ua	-es
	2.		-arum	-arum	-orum	-orum	-orum	-orum	-um	-um	-ium	-ium	-ium	-uum	-uum	-erum
	4.		-as	-as	-os	1	-os	1	-es	1	-es	-es	1	-us	1	-es
	6.		-is	-is	-is	-is	-is	-is	-ibus	-ibus	-ibus	-ibus	-ibus	-ibus	-ibus	-ebus
					+ Adj. of 2nd decl. M	+ Adj. of 2nd decl. N			+Com- parative forms M+F	+Com- parative forms N	+ Adj. of 3rd decl. M + F		+ Adj. of 3rd decl. N			

1st declension: Latin paradigm



case	singular	plural
nom.	ven a	ven ae
gen.	ven ae	ven arum
accus.	ven am	ven as
abl.	ven ā	ven is

1st declension: nouns of Greek origin



- Nouns of Greek origin belonging to the 1st declension have:

Genitive sg. ending	-ES	-AE
Nominative sg. ending	-E	-ES
Gender	F	M

1st declension: nouns of Greek origin



Declens.		I.		II.				III.					IV.		V.
Paradigm		vena		nervus	septum	<i>nephros</i>	<i>colon</i>	dolor	corpus	pelvis	<i>dosis</i> febris	rete	ductus	genu	facies
Gender		f.		m.	n.	m.	n.	m. + f.	n.	m. + f.	m. + f.	n.	m.	n.	f.
S i n g u l a r	1.	-a		-us/-er	-um	-os	-on	?	?	-is/-es	-(s)is/ -xis/-osis	-ar/-e/ -al	-us	-u	-es
	2.	-ae		-i	-i	-i	-i	-is	-is	-is	-is/-eos	-is	-us	-us	-ei
	4.	-am		-um	1	-on	1	-em	1	-em	-im/-in	1	-um	1	-em
	6.	-a		-o	-o	-o	-o	-e	-e	-e	-i	-i	-u	-u	-e
P l u r a l	1.	-ae		-i	-a	-i	-a	-es	-a	-es	-es	-ia	-us	-ua	-es
	2.	-arum		-orum	-orum	-orum	-orum	-um	-um	-ium	-ium	-ium	-uum	-uum	-erum
	4.	-as		-os	1	-os	1	-es	1	-es	-es	1	-us	1	-es
	6.	-is		-is	-is	-is	-is	-ibus	-ibus	-ibus	-ibus	-ibus	-ibus	-ibus	-ebus
		+ Adj. of 1st decl. F		+ Adj. of 2nd decl. M	+ Adj. of 2nd decl. N			+Com- parative forms M+F	+Com- parative forms N	+ Adj. of 3rd decl. M + F		+ Adj. of 3rd decl. N			

1st declension: Greek paradigms



	systole, es, f.	diabetes, ae, m.
nom. sg.	systole e	diabet es
gen. sg.	systol es	diabet ae
accus. sg.	systol en	diabet am
abl. sg.	systole e	diabet a

- all nouns declined like *systole, es, f.* are of **feminine gender**
- all nouns declined like *diabetes, ae, m.* are of **masculine gender**
- paradigms *vena, systole*, and *diabetes* have identical plural endings !!!

1st declension: Latin and Greek paradigms in plural



Declens.		I.			II.				III.					IV.		V.
Paradigm		vena	systole	diabetes	nervus	septum	nephros	colon	dolor	corpus	pelvis	dosis febris	rete	ductus	genu	facies
Gender		f.	f.	m.	m.	n.	m.	n.	m. + f.	n.	m. + f.	m. + f.	n.	m.	n.	f.
Singular	1.	-a	-e	-es	-us/-er	-um	-os	-on	?	?	-is/-es	-(s)is/ -xis/-osis	-ar/-e/ -al	-us	-u	-es
	2.	-ae	-es	-ae	-i	-i	-i	-i	-is	-is	-is	-is/-eos	-is	-us	-us	-ei
	4.	-am	-en	-am	-um	1	-on	1	-em	1	-em	-im/-in	1	-um	1	-em
	6.	-a	-e	-a	-o	-o	-o	-o	-e	-e	-e	-i	-i	-u	-u	-e
Plural	1.				-i	-a	-i	-a	-es	-a	-es	-es	-ia	-us	-ua	-es
	2.				-orum	-orum	-orum	-orum	-um	-um	-ium	-ium	-ium	-uum	-uum	-erum
	4.				-os	1	-os	1	-es	1	-es	-es	1	-us	1	-es
	6.				-is	-is	-is	-is	-ibus	-ibus	-ibus	-ibus	-ibus	-ibus	-ibus	-ebus
		+ Adj. of 1st decl. F			+ Adj. of 2nd decl. M	+ Adj. of 2nd decl. N			+Com- parative forms M+F	+Com- parative forms N	+ Adj. of 3rd decl. M + F		+ Adj. of 3rd decl. N			