

EXERCISES

1. **Connect the following nouns to form anatomical terms denoting parts of structures. Pay attention to singular/plural forms. What is the meaning of the phrases?**

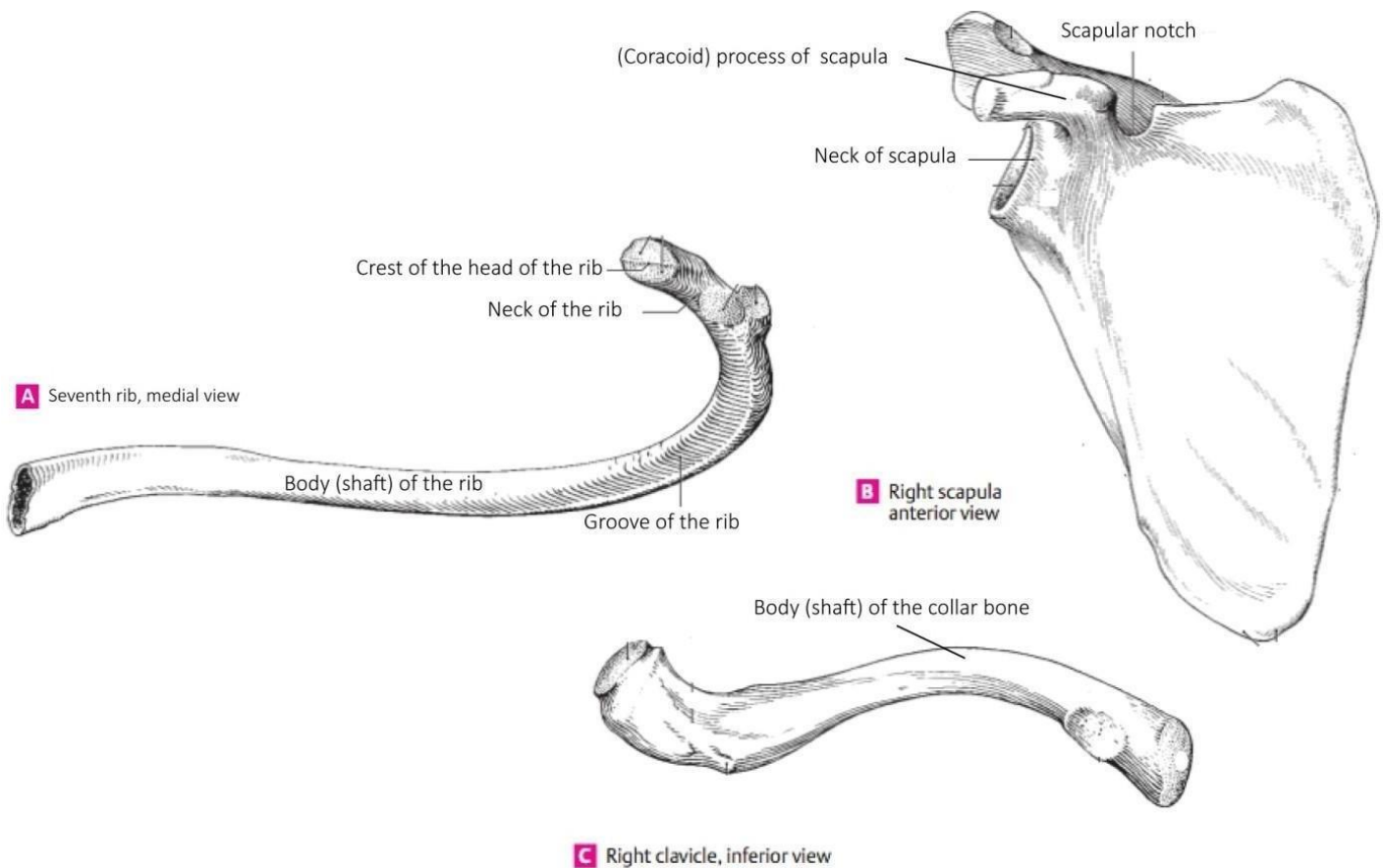
sulcus + sclera _____ *corpus + maxilla* _____

corpus + lingua _____ *symphysis + mandibula* _____

arcus + aorta _____ *collum + vesica* _____

columna + vertebrae _____ *rima + palpebrae* _____

2. **Replace the English terms for parts of bones with their Latin equivalents. Pay attention to word order and correct case endings.**



¹ Images copied, rearranged and adjusted; source: Feneis, H & Dauber, W.: Pocket Atlas of Human Anatomy, Thieme 2000.

3. *What is the meaning of the following Latin phrases?*

ruptura tendinis

ruptura venarum

fractura pollicis

arcus aortae

incisura mandibulae

fossa axillae

apertura linguae

ruptura fasciae

incisura scapulae

lamina sclerae

sulci cutis

fossae coxarum

apertura patellae

spina vertebrae

venae medullae

rima palpebrarum

fractura spinarum vertebrarum

fractura corporis vertebrae

therapia fracturae tibiae et fibulae

**4. Translate the following phrases into Latin. Pay attention to word order and correct case endings:
(English phrases with an adjective/noun instead of an “of” phrase are marked by *)**

fracture of the hip

fractures of the hip

*a hip fracture

fracture of calf bones

fractures of the calf bone

fracture of the rib

fractures of ribs

fracture of the head of femur

rupture of the tendon

hollow of the gland

arteries of the shoulder blade

*sternal crest

surface of the collar bone

fracture of the vertebra

fracture of *the vertebral column

fracture of the spine of shoulder blade

fracture of the upper and lower jaw

fracture of the radial and elbow bone

treatment of the fracture of collar bone

treatment of fractures of vertebrae

insufficiency of the *aortic valve

5. *Explain the difference between positions expressed by the following prepositional phrases.*

Notice how the case endings of the nouns change according to the preposition and the meaning.

e venis	e vena
in venas	in venis
in venam	in vena
in glandulam	in glandulas
e glandula	e glandulis
in glandulis	in glandula

6. *Translate the prepositional phrases into Latin. Pay attention to the number: the expressions on the left are all in singular, the expressions on the right are all in plural.*

near the opening	near openings
towards the gland	towards glands
with an anomaly	with anomalies
into the kneecap	into kneecaps
in the kneecap	in kneecaps
without diabetes	without allergies
into the aperture	into apertures
because of anemia	because of ruptures
under a layer	under layers

7. What is the meaning of the following Latin phrases? What cases are used and why?

in rima palpebrarum

post fracturas costarum

sine ruptura fasciae

contra dyspnoen

in fissuram hepatis

diarrhoe e colica

cum insufficientia valvulae aortae

8. Translate the following phrases into Latin. Pay attention to correct word order and case endings.

after fractures of hips

after rupture of the tendon

into the depression of shoulder blade

anemia due to bleeding

without lung infection

in the glands of tongue

before treatment of hernia

with shortness of breath

9. How should the case endings of the nouns change so that the phrases make sense?

post + therapia + angina / dyspnoe / diabetes

causa + hernia + abdomen / femur / vertebra

cum + insufficientia + oculus / arteriae / tonsillar

fractura + caput + mandibula / digitus / phalanx

sine + rupturae + tendo / venae / arteria

10. Match the given pathologies with their definitions.

<i>epilepsia</i>	a protrusion of an organ or body part through the lining of the cavity in which it is normally situated
<i>diphtheria</i>	a deficiency in the number of red blood cells
<i>scarlatina</i>	spasmodic pains in the abdomen
<i>insufficiencia</i>	an acute or chronic disease marked by infection of lungs
<i>allergia</i>	any of various neurological disorders characterized by sudden attacks, with or without loss of consciousness or convulsive seizures
<i>hernia</i>	a tear in an organ or a tissue
<i>pneumonia</i>	substantial bleeding
<i>colica</i>	an acute contagious disease caused by a hemolytic streptococcus, characterized by a scarlet skin eruption and high fever
<i>angina pectoris</i>	chest pain or pressure usually caused by insufficient blood flow to the heart muscle
<i>anaemia</i>	an overreaction of the immune system to a previously encountered, ordinarily harmless substance, resulting in skin rash or other abnormal conditions
<i>haemorrhagia</i>	a condition of improper functioning of an organ, tissue, etc.
<i>ruptura</i>	an acute contagious infection marked by the formation of a false membrane in the throat and other air passages causing difficulty in breathing

GRAMMAR

NOUN-ADJECTIVE AGREEMENT (= AGREED ATTRIBUTE)

Adjectives are words that modify and describe the qualities of nouns. In Latin, **an adjective always agrees with the noun it modifies in gender, case and number** (notice that the adjective does not have to belong to the same declension as the noun it modifies). This principle is called **noun-adjective agreement** and it is applied in all noun+adjective phrases (also called agreed attribute). The dictionary entry of each adjective contains Nominative singular forms for all genders. The choice of the proper form depends on the gender of the noun we want to modify. Thus, the **gender** of a noun has to be memorized together with the noun itself. The case and number of the adjective must also be identical with the case and number of the noun it modifies, e.g. if the noun is in plural form, the adjective must be in plural form, too; if the noun stands in Genitive case, the adjective must be in Genitive form as well.

In some declensions, the Nominative ending may give us a hint about the gender of the word. For instance, most of the 1st declension nouns are of female gender and end in *-a*. However, in other cases, the situation is not so simple, e.g. words ending in *-us* may be males of the 2nd declension (*nervus, i, m.*), neutrals of the 3rd declension (*corpus, oris, n.*), or even males of the 4th declension (*ductus, us, m.*). Therefore, it is recommended to memorize the gender of a noun together with the word itself.

CONSEQUENCES OF GRAMMATICAL AGREEMENT (AGREED ATTRIBUTE)

As nouns are of three genders in Latin, adjectives have also three different forms to comply with the gender of the noun. A feminine noun can never be connected with an adjective in masculine or neutral form; a masculine noun can never be connected with an adjective in feminine or neutral form etc.

Adjectives of the 1st and 2nd declension are inflected as nouns of the 1st and 2nd declension. Ordinal numbers in Latin, too, behave as adjectives of the 1st and 2nd declension. In anatomical nomenclature, we only use ordinal numbers from 1 to 12. Adjectives of 1st and 2nd declension as well as ordinal numbers 1-12 have the following Nominative singular endings:

masculines	feminines	neutrals
-us (-er)	-a	-um

The dictionary entry contains a full male form followed by female and neutral endings,

E.g. *magnus, a, um* > M: *magnus*, F: *magna*, N: *magnum*

primus, a, um > M: *primus*, F: *prima*, N: *primum*

Some adjectives end in -er instead of -us Nominative sg. in male form; in such cases, it is always indicated whether the -e- is omitted or stays in other than Nominative singular male form (the same principle applies for nouns ending in -er).

E.g. *dexter, tra, trum* > M: *dexter*, F: *dextra*, N: *dextrum* (-e- is omitted)

liber, era, erum > M: *liber*, F: *libera*, N: *liberum* (-e- stays)

INFLECTION of

NON-AGREED ATTRIBUTE

AGREED ATTRIBUTE

sg.

1. fractura **vertebrae**

2. (causa) fracturae **vertebrae**

4. (post) fracturam **vertebrae**

6. (cum) fractura **vertebrae**

1. fractura **complicata**

2. fracturae **complicatae**

3. (post) fractur**am** **complicat**am****

4. (cum) fractura **complicata**

pl.

1. fracturae **vertebrarum**

2. (causa) fracturarum **vertebrarum**

4. (post) fracturas **vertebrarum**

6. (cum) fracturis **vertebrarum**

1. fracturae **complicatae**

2. fractur**arum** **complicatarum**

4. (post) fractur**as** **complicat**as****

6. (cum) fractur**is** **complicat**is****

The noun in Genitive remains the same!

Both noun and adjective change accordingly!

VOCABULARY

ANATOMICAL NOMENCLATURE

albus, a, um	white
auditivus, a, um	auditory
bursa, ae, f.	pouch, sack, bursa
cavus, a, um	hollow (with <i>vena</i>)
cellula, ae, f.	cell
coccygeus, a, um	coccygeal, related to coccyx
coronarius, a, um	coronary (with <i>arteriae</i>)
decimus, a, um	tenth
dexter, tra, trum	right
externus, a, um	external
felleus, a, um	bilious, related to bile
fuscus, a, um	brown
gastricus, a, um	gastric, related to stomach
iliacus, a, um	iliac, related to iliac bone
internus, a, um	internal
latus, a, um	wide, broad
liber, era, erum	free, loose
magnus, a, um	big, large
medianus, a, um	median, located in between two structures
medius, a, um	middle
mucosus, a, um	mucous, related to mucus
niger, a, um	black
obliquus, a, um	oblique, inclined
oblongatus, a, um	prolonged
palatinus, a, um	palatal, related to palate
parvus, a, um	small
plica, ae, f.	fold
proprius, a, um	proper, distinctive
profundus, a, um	deep
serosus, a, um	serous, related to serum
sinister, tra, trum	left
spurius, a, um	false (with <i>costa</i>)
subcutaneus, a, um	subcutaneous, located under skin
thoracicus, a, um	thoracic, related to thorax
transversus, a, um	transverse
tuba, ae, f.	tube
uterinus, a, um	uterine, related to uterus
urinarius, a, um	urinary
verus, a, um	true (with <i>costa</i>)

CLINICAL TERMINOLOGY

acquisitus, a, um	acquired
acutus, a, um	acute (severe symptoms, short-term)
apertus, a, um	open
chirurgicus, a, um	surgical
chronicus, a, um	chronic (mild symptoms, long-term)
clausus, a, um	closed
complicatus, a, um	complicated
congenitus, a, um	congenital, inborn
epidemicus, a, um	epidemic, occurring in excessive numbers
mellitus, a, um	type of diabetes, lit. related to honey
periculosus, a, um	dangerous
postoperativus, a, um	occurring after operation, postoperative
secundarius, a, um	secondary, not primary
<i>*ORDINAL NUMBERS</i>	
primus, a, um	first
secundus, a, um	second
tertius, a, um	third
quartus, a, um	fourth
quintus, a, um	fifth
sextus, a, um	sixth
septimus, a, um	seventh
octavus, a, um	eighth
nonus, a, um	ninth
decimus, a, um	tenth
undecimus, a, um	eleventh
duodecimus, a, um	twelfth

IMPORTANT COLLOCATIONS

<i>diabetes mellitus</i>	diabetes (metabolic disorder marked by high blood sugar levels)
<i>glandula thyroidea</i>	thyroid gland (an endocrine gland in the throat secreting hormones influencing metabolic rate, protein synthesis, etc.)
<i>lamina propria</i>	a thin layer of loose connective tissue, or dense irregular connective tissue, which lies beneath the epithelium and together with the epithelium constitutes the mucosa
<i>linea alba</i>	the tendinous median line on the anterior abdominal wall between two straight muscles
<i>medulla oblongata</i>	prolongation of the spinal cord
<i>rima palpebrarum</i>	free space between eyelids, the fissure between eyelids
<i>tuba auditiva</i>	Eustachian tube, also called auditory (or pharyngotympanic) tube, links nasopharynx with the middle ear
<i>tuba uterina</i>	Fallopian tube, or uterine tube
<i>(tunica) mucosa</i>	membrane that lines cavities and surrounds internal organs
<i>(tunica) serosa</i>	smooth tissue membrane consisting of two layers of mesothelium which secretes serous fluid
<i>vesica fellea</i>	gall bladder
<i>vesica urinaria</i>	urinary bladder