

МИНИСТЕРСТВО ЗДРАВООХРАНЕНИЯ РЕСПУБЛИКИ БЕЛАРУСЬ

**УЧРЕЖДЕНИЕ ОБРАЗОВАНИЯ
«ГОМЕЛЬСКИЙ ГОСУДАРСТВЕННЫЙ МЕДИЦИНСКИЙ УНИВЕРСИТЕТ»**

Кафедра иностранных языков

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ЛАТИНСКИЙ ЯЗЫК

(основы грамматики и анатомическая терминология)

**Учебно-методическое пособие
по латинскому языку для студентов 1 курса факультета
по подготовке специалистов для зарубежных стран
медицинских вузов**

3-е издание, стереотипное

LATIN LANGUAGE

(basics of grammar and anatomical terminology)

**The educational methodological text-book on latin
for 1st year English medium medical students
of the Faculty of General Medicine for overseas students
of medical university**

**Гомель
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В учебно-методическом пособии на базе анатомической терминологии излагаются основные положения латинской грамматики, необходимые для правильного запоминания и самостоятельного конструирования анатомо-гистологических терминов.

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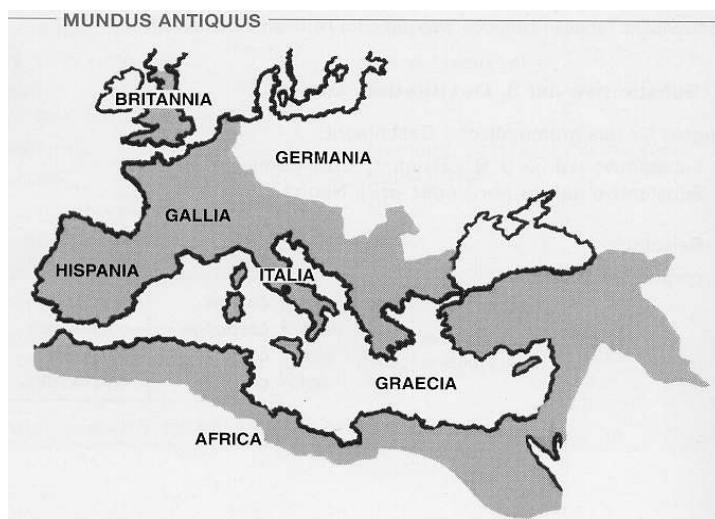
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INTRODUCTION

§ 1. From the history of medical terminology

Training a doctor is impossible without studying special terminology. Speaking on a professional topic a doctor uses 50–80 per cent of words of Latin and Greek origin. All the spheres of medicine are based on Latin and Ancient Greek languages. There is a saying among doctors and pharmacists: **Invīa est in medicīna via sine lingua Latīna** (There is no way in medicine without Latin).

Latin is one of the dead languages. Its history goes back to the beginning of the first millennium B.C. Latin was the language of the tribe in a small region *Latium* situated in the middle part of the Apennine peninsula. The tribe called itself *Latīni* and their language was Latin (*Lingua Latīna*). The *Latīni* fought numerous aggressive wars. So by the beginning of the first century B.C. Latin had become the language of the Roman Empire (from modern Portugal to modern Romania). Since 753 B.C. Rome had been the capital of the Roman Empire.



In 476 A.D. the Roman Empire fell, and since the 6th century A.D. Latin has stopped functioning as a spoken language and now is considered dead. New European countries appeared on the territory of the former Roman Empire and they continued using Latin as a means of international communication, language of science and education. The role of literary Latin was extremely significant in the history of medieval Western Europe. All Western European languages borrowed Latin alphabet and nowadays it is spread all over the world.

Greece, the country with highly developed culture and science, was conquered by the Romans in 146 B.C. In the 5th century B.C., in the so-called classical epoch, Greece was marked by the development of sciences and medicine. In this period there lived a great ancient doctor Hippocrátēs (460–377 B.C.), «the father of scientific European medicine». The basis of scientific medical terminology was presented in his works. The following Greek terms were found in Hippocrátēs' works: *bronchus*, *urethra*, *herpes*, *coma*, *nephritis*, *polyp*, *cholera*, *epidemic* and others.

Romans' medical and biological knowledge was inferior to the achievements of the Greek medicine, therefore scientific knowledge and terminology were mainly borrowed from the Greek. In the period of the Roman Empire military medicine and doctoring were widely developing. Most doctors were Greek and they had to teach medicine in special schools. Initially, teaching was in Greek but meanwhile the role of Latin increased. There appeared the works of Roman scientists and doctors on scientific and medical questions. In the 1st century B.C. **Aulus Cornelius Celsus** created a medical encyclopedia where he presented special medical vocabulary. For example: *abdomen, anus, articulatio, caecum intestinum, cartilago, cervix, cubitus, digitus, femur, humerus, index* and others. He used terms mainly taken from the Greek but often used Latin terms as synonyms. Since then ancient doctors had to know two languages: Greek and Latin, and medical terminology started developing on bilingual Greek-Latin basis. This bilingualism became traditional in medical terminology of the subsequent epochs.

In the Middle Ages medicine in Europe had little development. Arabic medicine took the leading position. Many important ancient Greek works were translated into the Arabic language. Within five centuries — from 800 to 1300 — Arabic medical works by more than 70 authors became known. One of the most significant Arabic works is «The Canon of Medicine» written by **Avicenna**. This work was translated into Latin in the 12th century and was dominating in teaching medicine in Europe up to the end of the 16th century.

A fresh upsurge of Latin was in the Renaissance epoch (14th–16th centuries). Great geographic discoveries, development of cities and trading, falling of church authority created favorable conditions for scientific investigations in medicine. Latin started taking its positions as the international language of science.

A great anatomy reformer **Vesalius** (1514–1564) lived in that epoch and he was the author of the prominent works «Anatomical tables» and «About the structure of human body». These works were of great importance for anatomy development as well as for improving Latin anatomical terminology. Like Celsus, Vesalius tried to make terminology unified.

The contribution of Renaissance anatomists in developing anatomical terminology was enormous: about 700 names were borrowed from Greek, and by the end of the 18th century there were about 30000 anatomical terms.

The greatest scientists of the Renaissance and New Time used Latin in their works. They are great philosophers and scientists Copernicus, Galileo, Newton, Leibniz. Defending theses, making discussions, writing scientific articles and works, making international correspondence — all this was in Latin.

Even in the 17th century many scientists continued writing in Latin. The great Swedish botanist Carolus Linnseus classified the vegetable kingdom in Latin.

Nowadays, Latin preserves its function of the international means of naming in anatomy, histology, embryology, microbiology, partly in pathological anatomy and clinical disciplines, and in pharmacology and pharmacotherapy.

PHONETICS

LESSON 1

§ 2. Latin alphabet

<i>Letter</i>	<i>Name</i>	<i>Pronunciation</i>	<i>Letter</i>	<i>Name</i>	<i>Pronunciation</i>
Aa	a	[a]	Nn	en	[n]
Bb	be	[b]	Oo	o	[o]
Cc	tse	[ts; k]	Pp	pe	[p]
Dd	de	[d]	Qq	ku	[k]
Ee	e	[e]	Rr	er	[r]
Ff	ef	[f]	Ss	es	[s; z]
Gg	ge	[g]	Tt	te	[t]
Hh	ha	[g/h]	Uu	u	[u; v]
Ii	i	[i]	Vv	ve	[v]
Jj	jota	[j]	Xx	iks	[ks]
Kk	ka	[k]	Yy	epsilon	[i]
Ll	el	[l]	Zz	zeta	[z]
Mm	em	[m]			

§ 3. Pronunciation of vowels

A a	[a]	pars [párs] <i>part</i>
O o	[o]	frons [fro̞ns] <i>forehead</i>
E e	[e]	pes [pe̞s] <i>foot</i>
<i>All the consonants before «e» are pronounced hard. But «l» is pronounced soft: levator [l'evator] <i>elevator muscle</i></i>		

Exercise 1. Read and pay attention to the pronunciation of the vowels: vértebra (vertebra), cérerum (brain), olécranón (elbow tip), intermédia (intermedium), stérnum (breast bone), léctor (lecturer), procéssus (process), túber (tuber, large rounded swelling), forámen (opening), levátor (elevator muscle), fémur (thigh bone), média (middle), intervertebrális (intervertebral), ve̞nter (belly), no̞rma (norm), abdo̞men (abdomen), membra̞na (membrane), órbita (orbit), a̞rea (area), te̞ndo (tendon), re̞te (network).

I i	1) [i]	— <i>in most words</i>	index [índeks] <i>index, forefinger</i>
	2) [j]	— <i>at the beginning of a word before vowels</i> But: <i>in words of Greek origin [i]</i> — <i>in the middle of a word between vowels</i>	<u>íuguláris</u> = <u>juguláris</u> [jugula̞ris] <i>jugular</i> <u>Iódum</u> [iódum] <i>iodine</i> <u>maiór</u> = <u>major</u> [ma̞jor] <i>large</i>

Exercise 2. Read and pay attention to the pronunciation of the vowel «i»:
 iunctúra — junctúra (joining), internum (internal), iuguláris — juguláris (jugular), intestínum (intestine), iater (*Greek*) (doctor), máior — májor (large), infratemporalis (infratemporal), ieínum — jejúnum (jejunum), digitalis (digital), paries (wall), iuvéntus — juvéntus (youth), mastoideus (mastoidal), ilíacus (iliac).

U u	[u]	tuber [tuber] <i>tuber</i>
ngu	[ngv] before a vowel [ngu] before a consonant	lingua [li <small>ngva</small>] <i>tongue</i> angúlus [a <small>ngulus</small>] <i>angle</i>
qu	[kv]	squama [skva <small>ma</small>] <i>squama, scale</i>
su	[sv]	suavis [sva <small>vis</small>] <i>sweet</i>

Exercise 3. Read and pay attention to the pronunciation of the vowel «u»:
 aquaedúctus (water supply), sánguis (blood), tubérculum (tubercle), Quérkus (oak), sublingualis (sublingual), tríquetrum (three-edged), língua (tongue), áqua (water), quíntus (the fifth), únguis (nail), ángulus (angle), quadrátus (square), squamósus (squamous, scaly), oblíquus (oblique), inguinalis (inguinal), quadriceps (four-headed), unguéntum (ointment), lingula (small tongue).

Y y	[i]	appears only in Greek words	gyrus [gírus] <i>gyrus, convolution</i>
Remember the most used Greek prefixes and root elements with the vowel «y»:			
dys-[dis], hypo-[hipo], hyper-[hiper], syn-[sin], sym-[sim], myo-[mio], phys-[fiz]			

Exercise 4. Read and pay attention to the pronunciation of the vowel «y»:
 cóndylus (condyle), tympánicus (tympanic), styloídeus (styloid, awl-shaped), hyoídeus (hyoid, sublingual), hypoglóssus (hypoglossal), cytología (study of cells), cýsta (cyst), dyspépsia (disturbance of digestion), sýmphyseis (adhesion), systéma (system), pýramis (pyramid), pylórus (pylorus of the stomach), pterygoídeus (pterygoid, wing-like), syndactýlia (fusion of fingers), stylohyoídeus (stylohyoid), Hydrárgyrum (mercury).

§ 4. Diphthongs

Diphthong is a combination of two vowels pronounced like one sound or syllable. There are four diphthongs in Latin: **ae, oe, au, eu**.

ae	[e]	vertebrae [vértebre] <i>ribs</i>
oe	[e]	oesophágus [ezo <small>fagus</small>] <i>esophagus</i>
au	[au]	auris [a <small>uris</small>] <i>ear</i>
eu	[eu]	pleura [ple <small>ura</small>] <i>pleura</i>

NB! If there is ē or ë in ae (aē/aē) or oe (oë/oë), each vowel is pronounced separately.

aë / aē	[ae]	aër [āer] <i>air</i>
oë / oē	[oe]	diploē [dīploē] <i>diploe</i>

Exercise 5. Read and pay attention to the pronunciation of the **diphthong**: vértebrae (vertebrae), cóstae vérae (true ribs), áuris (ear), néutrum (neuter gender), diáeta (diet), pléura (pleura), cáuda (tail), roentgénum (X-ray examination), neurósis (disorder of nervous system), oedéma (oedema, hydrops), díploē (spongy substance), Alóë (aloe), uropoësis (formation of urine), cáecum (blind intestine), leucopoësis (formation of white blood cells), haemopoësis (formation of blood).

§ 5. Pronunciation of consonants

C c	1) [ts]	<i>before e, i, y, ae, oe</i>	processus [protsēssus] <i>process</i>
	2) [k]	<i>in other cases</i>	facies [fāsies] <i>face, surface</i> caecum [tsēkum] <i>cecum</i> caput [kāput] <i>head</i> corpus [kórpus] <i>body</i> accessorius [aktsessōrius] <i>accessory</i>

Exercise 6. Read and pay attention to the pronunciation of the consonant «c»: canális (canal), occipitális (occipital), tubérculum (tubercl), acetábulum (acetabulum, cup-like cavity), accessórius (accessory), córpus (body), cíngulum (girdle), crísta (crest), procéssus (process), cráñium (skull), fácies (face, surface), cáput (head), cérebrum (brain), cóllum (neck), cáecum (blind intestine), cadáver (dead body, corpse), coerúleus (blue), cósta (rib), coccygéus (coccygeal), fáscia (fascia, sheath of muscles), colúmna (column), cervicális (cervical).

G g	[g]	gaster [gāster] <i>stomach</i>
H h	[g/h]	homo [hōmo] <i>man</i>
K k	[k]	skeléton [skēleton] <i>skeleton</i>
L l	[l] (<i>is always pronounced softly</i>)	lamína [lāmina] <i>thin plate, lamina</i> cartilágo [kartilāgo] <i>cartilage</i>

Exercise 7. Read and pay attention to the pronunciation of the consonant «l»: cólon (large intestine), lúmbus (loin), átlas (atlas, first cervical vertebra), cartilágo (cartilage), cóllum (neck), clavícula (clavicle), lābium (lip), sélla (saddle), hámulus (hook), lōbus (lobe), glándula (gland), lámina (lamina, thin plate), ovālis (oval), laterális (lateral), palátum (palate), fíbula (splint-bone), válvula (valve, flap), úlna (elbow bone), úlcus (ulcer), āla (wing), lōngus (long), āngūlus (angle), pylōrus (pylorus of the stomach), līnea (line), plānus (plain), frontālis (frontal), longitudinālis (longitudinal, lengthwise),

pu[□]lmo (lung), alve[□]olus (alveolus), li[□]ber (free), la[□]tus (wide), bu[□]lbus (bulb), mo[□]bilis (mobile), pe[□]lvis (pelvis), medu[□]lla (medullary substance), abdomina[□]lis (abdominal), mandi[□]bula (lower jaw), fla[□]vus (yellow).

S s	1) [s] 2) [z]	<i>in most words</i> — between two vowels — between a vowel and the consonant «m» or «n»	<u>os</u> [os] <i>bone</i> <u>basis</u> [ba [□] zis] <i>base</i> <u>chiasma</u> [hiázma] <i>chiasm</i>
ss	[ss]		<u>ossa</u> [o [□] ssa] <i>bones</i>

Exercise 8. *Read and pay attention to the pronunciation of the consonant «s»:*

os (bone), óssa (bones), incisúra (notch), supe[□]rior (superior, upper), procéssus (process), si[□]nus (sinus), spinósus (spinous), sacrális (sacral), fibro[□]sus (fibrous), tuberósitas (tuberosity), básis (base), petrósus (petrous), impre[□]sso (impression), fissu[□]ra (fissure, narrow split), séptum (dividing wall), rece[□]ssus (recess), transfúcio (transfusion), na[□]sus (nose), ósseus (bony), su[□]lcus (groove), transve[□]rsus (transverse), pars (part), dens (tooth), muco[□]sus (mucous), nasolacrima[□]lis (nasolacrimal), ste[□]rnum (breast bone), veno[□]sus (venous), dista[□]lis (distal), fa[□]scia (fascia, sheath of muscles), hypoglóssus (hypoglossal), fo[□]ssa (shallow depression), tonsi[□]lla (tonsil).

T t	[t]	tendo [téndo] <i>tendon</i>
ti	[tsi] <i>before a vowel</i> [ti] <i>after s, t, x</i>	substântia [substa [□] ntsia] <i>substance</i> ostium [o [□] stium] <i>opening, ostium</i>

Exercise 9. *Read and pay attention to the pronunciation of the combination «ti»:* eminéntia (elevation), digéstio (digestion), protuberântia (projection), spátium (interval, space), o[□]pticus (optic), ti[□]bia (shin-bone), tértius (the third), perforáto (perforation), substântia (substance), articula[□]tio (joint), óstium (orifice, mouth), distântia (distance), intesti[□]num (intestine), evolútio (evolution), imitátio (imitation), palatí[□]nus (palatine), vesti[□]bulum (vestibule, threshold), reti[□]na (retina).

X x	[ks]		<u>apex</u> [a [□] peks] <i>apex, tip</i>
Z z	1) [z]	<i>in words of Greek origin</i>	<u>zygomatičus</u> [zigomáticus] <u>zygomatic</u>
	2) [ts]	<i>in words of non-Greek origin</i>	<u>influenza</u> [influe [□] ntsa] <i>influenza</i> <u>Zincum</u> [tsi [□] nkum] <i>zinc</i>

Exercise 10. *Read correctly:* ápex (tip), áxis (axis, second cervical vertebra), extrémitas (extremity), extérnus (external), zygomatičus (zygomatic), lárynx (larynx, throat), zóna (zone), Zíncum (zinc), rádix (root), déxter (right),

proximális (proximal), pléxus (plexus), appéndix (appendix), influénza (influenza), zygóma (zygoma, cheek-bone), xeróstómia (dryness of the mouth).

§ 6. Digraphs

Digraphs were brought from Greek and are mainly used in Greek words. There are four digraphs in Latin: **ch, ph, rh, th**.

ch	[h]	brachium [bráhium] <i>shoulder</i>
ph	[f]	phalanx [fa□lanks] <i>phalanx</i>
rh	[r]	rhaphe [ra□fe] <i>raphe, suture</i>
th	[t]	thorax [to□raks] <i>chest, thorax</i>
sch	[sh]	ischium [i□skhium] <i>ischium</i>

Exercise 11. Read correctly: thórax (chest), thorácicus (thoracic), cóncha (concha), núcha (nucha), pharyngéus (pharyngeal), scaphoídeum (keel-shaped), sphenoidális (wedge-shaped), ethmoidális (sieve-shaped), labyrínthus (labyrinth), íschium (ischium), ischiádicus (ischiadic), Schizándra (magnolia-vine), rhizóma (rhizome), ráphe (rhaphe) (suture), phárynx (pharynx), Glycyrrhíza (licorice), Chamomilla (camomile), Althaea (marshmallow), Heliánthus (sunflower), Galánthus (snowdrop), encéphalon (brain), sýmphysis (adhesion), synchondrosis (adhesion of bones), xeróphthálmia (dryness of eye), xerochéilia (dryness of lips), achýlia (absence of gastric juice secretion), chylothórax (accumulation of lymph in the pleural cavity), ophthalmorrhágia (bleeding from the eye), ophthalmorrhéxis (rupture of the eye).

Training exercises for home reading

1. Cránum; colúmna vertebrális; clavícula; stérnum; húmerus; os sácrum; os cóxae; fémur; patélla; tibia; fibula; óssa pédis; óssa digitórum; óssa metatársi; óssa társi; óssa metacárpi; óssa cárpi; rádius; úlna; cóstae; scápula; os ethmoidále; os lóngum; os plánum; óssa brévia; os irreguláre; línea epiphysiális; substántia spongiósa; substántia compácta; cávitas medulláris; periósteum; laméllae circumferentáles intérnae; laméllae circumferentáles extérnae; trabéculae ósseae; canális nutrítius; vasa sanguínea; lacúna ossea; cáput húmeri; cóllum anatómicum; cóllum chirúrgicum; tubérculum mínu; tubérculum május; diáphysis húmeri; fóssa olécrani; epicóndylus laterális; tróchlea húmeri; súlcus nérvii ulnáris; epicóndylus mediális; skéleton axiále; óssa thorácis; óssa mémbri superióris; óssa mémbri inferióris.

2. Párs cervicális colúmnae vertebrális; párs thorácica colúmnae vertebrális; párs lumbális colúmnae vertebrális; os sácrum; os coccýgis; promontórium; procéssus transvérsus; vértebra thorácica; átlas; áxis; córpus vértebrae; árcus vértebrae; pedúnculi árcus vértebrae; forámen vértebrae; procéssus spinósus; fóvea costális procéssus transvérsi; procéssus transvérsus; procéssus articuláris supérior; procéssus articuláris inférior; incisúra vertebrális inférior; vértebra cervicális; forámen

procéssus transvérsi; súlcus artériae vertebrális; súlcus nérvi spinális; tubérculum antérius; tubérculum postérius; tubérculum caróticum; párs cervicális; párs thorácica; párs lumbális; vértebra próminens; forámina intervertebrália; vértebra lumbális; fóvea costális supérior; incisúra vertebrális supérior; árcus antérior; mássa laterális; fácies articúlaris postérior; fácies articuláris supérior; procéssus articuláris inférior; procéssus mamilláris; procéssus accessórius; básis óssis sácri; ápex óssis sácri; forámina sacrália anterióra; vértebrae sacráles; fácies pelvína; fácies dorsális; forámina pelvína; crísta sacrális mediána; crísta sacrális intermédia; crísta sacrális laterális; canális sacrális; tuberósitas sacrális; fácies auriculáris; hiátus sacrális; ála sacrális; córnu cocygéum; córnu sacrále.

3. Cáput cóstae; súlcus cóstae; cóllum cóstae; tubérculum cóstae; angúlus cóstae; córpus cóstae; fácies articuláris tubérculi cóstae; tubérculum músculi scaléni anterióris; súlcus vénae, artériae subcláviae; tubérculum músculi serráti anterióris; stérnum; manúbrium stérni; córpus stérni; procéssus xiphóideus; incisúra juguláris; incisúra claviculáris; incisúrae costáles; apertúra thorácis supérior; acrómion; spátia intercostália; cartilágó costális; ángulus infrasternális; cóstae fluctuántes; cóstae spúriae; cóstae vérae; procéssus spinósus vértebrae thorácicae.

LESSON 2

§ 7. Accent rules. Word stressing.

One of the syllables in a word is always more accentuated than the others. We say that this syllable is stressed.

To determine which syllable is stressed the word should be divided into syllables. Every Latin word has as many syllables as it has vowels or diphthongs: — *la-mi-na*; *fo-ve-a*; *ar-cus*; *di-ae-ta*; *pleu-ra*; *pneu-ma*; *oe-so-pha-gus*

The main rules of stressing a word:

- 1) The final syllable of a word is never stressed.
- 2) In dsyllabic words (consisting of two syllables) the first syllable is stressed. *ár-cus*, *búr-sa*, *fún-dus*.
- 3) In polysyllabic words (consisting of three and more syllables) the penultimate syllable (next to the last syllable) is stressed if it's long.
- 4) If the penultimate syllable is short the stress is shifted to the third syllable from the end.

To stress the word correctly you should:

- 1) divide the word into syllables;
- 2) find the penultimate syllable;
- 3) determine if it is long or short;
- 4) if it is long, it is stressed. If the penultimate syllable is short the stress is shifted to the third syllable from the end.

Syllables may long or short by nature and by its position in the word.

Long syllables by nature	Short syllables by nature
if it contains a long vowel (with a long mark above the vowel ¯): á, é, í, ó, û: ve-sí-ca (vesíca) <i>bladder</i> fo-rá-men (forámen) <i>opening</i> in-ci-sú-ra (incisúra) <i>notch</i>	if it contains a short vowel (with a short mark above the vowel `): á, é, í, ó, û: la-mí-na (lámina) <i>plate</i> tu-ber-cú-lum (tubérculum) <i>tubercler</i>
Long syllables by position	Short syllable by position
1) if the syllable has a diphthong: a-moe-ba (amóeba) <i>amoeba</i> 2) if the vowel of the syllable is followed by two or more consonants or consonant x, z: co-lum-na (colúmna) <i>column</i> ; pro-fun-dus (profundus) <i>deep</i> ; cir-cum-fle-xus (circumfléxus) <i>circumflex</i> ; re-fle-xus (refléxus) <i>reflex</i> ; Gly-cy-rrhi-za (Glycyrrhíza) <i>licorice</i>	1) if the vowel of the syllable is followed by the vowel of the next syllable: fa-ci-es (fácies) <i>face</i> ; cra-ni-um (cráñium) <i>skull</i> 2) if the vowel of the syllable is followed by a consonant group b, p, d, t, c, g + r, l or by ch, ph, th, rh : ce-re-brum (cérebrum) <i>brain</i> ; ver-te-bra (vértebra) <i>vertebra</i> ; pal-pe-bra (pálpebra) <i>eyelid</i> ; cho-le-do-chus (cholédochus) <i>bilious</i> ; sto-ma-chus (stómachus) <i>stomach</i> (<i>Greek</i>)

Remember the following long and short suffixes

Long suffixes	Short suffixes
	<i>noun suffixes:</i>
-ūr- fissúra <i>fissure</i> ; iunctúra <i>joining</i> -īn- mediciṇa <i>medicine</i>	-ōl- fovéola <i>small pit</i> -ūl- glándula <i>gland</i> -cūlum- tubérculum <i>tubercle</i>
	<i>adjective suffixes:</i>
-al- lumbális <i>lumbar</i> -ar- articuláris <i>articular</i> -at- digitátus <i>like fingers</i> - hamátus <i>like a hook</i> -in- pelvínus <i>pelvic</i> -os- spinósus <i>spinous</i> -ē- coccygéus <i>coccygeal</i>	-ic- gástricus <i>gastric</i> ; - thorácicus <i>thoracic</i> ; - ópticus <i>optic</i> -ac- cardíacus <i>cardiac</i> -ě- ósseus <i>bony</i> - tendíněus <i>tendinous</i>

EXERCISES

1. Read the following disyllabic words:

ala, anus, arcus, apex, atlas, basis, bursa, biceps, caput, cavum, coccyx, dorsum, ductus, fossa, fornix, gaster, genu, hepar, humor, cornu, homo, incus, index, iris, larynx, latus, lobus, lumbus, manus, margo, mentum, naris, nasus, nucha, nodus, ossa, pelvis, phalanx, pilus, planus, plica, radix, ramus, rectum, rete, sacrum, spina, sternum, sulcus, teres, tegmen, textus, tractus, tuber, ulna, vena, verus.

2. Stress the following words minding long and short marks:

abdōmen, acetabūlum, angūlus, biliāris, calcanēus, cavītas, coccygēus, digītus, distālis, duodēnum, oesophāgus, flexūra, gastrīcus, forāmen, glandūla, hiātus, humērus, incisīvus, intercostālis, laryngēus, mediālis, meātus, minīmus, orgānon, ossēus, palātum, petrōsus, proxīmus, radiālis, pyrāmis, retinacūlum, scapūla, spinālis, superficiālis, utērus, urēter, vagīna, vesīca.

3. Find the penultimate syllable and stress the words correctly:

acromion, anterior, arteria, articulatio, brachium, capsula, caverna, cerebellum, cilium, columna, compactus, externus, fovea, ganglion, griseus, hypoglossus, impressio, ischium, interosseus, labium, linea, manubrium, maxilla, medulla, metatarsus, nucleus, ostium, periosteum, processus, proprius, recessus, rotundus, spatium, tonsilla, urinarius.

4. Accent the following words and give the necessary explanations:

processus, ala, squamōsus, externus, tubercūlum, superior, laterālis, rotundum, carotīcus, crista, posterius, maxillāris, aquaeductus, sutūra, internus, angūlus, fovea, zygomaticūs, spatium, spina, frontālis, medicīna, labyrinthus, maxilla, ulna, petrōsus, lamīna, linea, pyrāmis, palpēbra, foramīna, protuberantia, columna, canālis, profundus, incisūra, glandūla, palaīnus, medius, humērus, oleum, cerēbrum, pharyngēus, atlas, jugulāris, spinōsus, symphysis, facies, epiphysis, ischium, pelvīnus, forāmen, tuberosītas, tympānum, cartilāgo, hamātus.

Control reading and stressing

1. Cranium; cranium cerebrāle; neurocranium; sutūra frontālis; os nasāle; arcus superciliāris; forāmen supraorbitāle; os parietāle; facies orbitālis ossis frontālis; sutūra sphenofrontālis; sutūra frontozygomaticā; facies orbitālis alae majōris ossis sphenoidālis; sutūra sphenozygomaticā; forāmen zygomaticofaciāle; os zygomaticūm; sutūra zygomaticomaxillāris; forāmen infraorbitāle; concha nasālis inferior; tuberosītas masseterīca; lamīna perpendicularis ossis ethmoidālis; angūlus mandibūlae; spina nasālis anterior; juga alveolāria; protuberantia mentālis; forāmen mentāle; sutūra intermaxillāris; cavum nasi; fissūra orbitalis inferior; facies orbitalis maxillae; os lacrimāle; lamīna orbitalis ossis ethmoidālis; squama temporālis; processus zygomaticūs ossis frontālis; tuber frontāle; septum nasi ossēum; sinus maxillāris; dentes maxillae; mandibūla; sutūra coronālis; sutūra sphenoparietālis;

margo parietālis ossis temporālis; sutūra temporozygomatiča; arcus zygomaticus; processus styloidēus; porus acusticus externus; processus mastoidēus; sutūra occipitomastoidēa; sutūra lambdoidēa; linea temporālis inferior; linea temporālis superior; squama temporālis; sutūra squamōsa.

2. Os frontāle: squama frontālis; tuber frontāle; glabella; processus zygomaticus; margo parietālis; sulcus sinus sagittālis superiōris; facies cerebrālis; impressiōnes digitātae; forāmen caecum; canālis opticus; incisūra ethmoidālis; sinus sphenoidalis; canālis pterygoidēus; processus pterygoidēus; ala major; fossa glandūlae lacrimālis; lamīna orbitalis labyrinthi ethmoidālis; forāmen ethmoidāle anterius; cellūlae ethmoidāles.

3. Os sphenoidāle: apertūra sinus sphenoidālis; dorsum sellae; concha sphenoidālis; fissūra orbitalis superior; ala minor; margo zygomaticus; sulcus pterygopalatīnus; lamīna laterālis processus pterygoidēi; hamūlus pterygoidēus; processus vaginālis; rostrum sphenoidāle; forāmen rotundum; facies orbitalis alae majōris; canālis opticus; processus clinoidēus posterior; fossa scaphoidēa; sulcus hamūli pterygoidēi; sulcus carotīcus; tubercūlum sellae; sulcus prechiasmātis; forāmen ovāle; forāmen spinōsum; forāmen magnum; squama occipitālis; clivus; fossa hypophysiālis.

4. Os occipitāle: protuberantia occipitālis externa; linea nuchae superior; linea nuchae inferior; linea nuchae suprēma; squama occipitālis; pars basilāris; tubercūlum pharyngēum; eminentia cruciformis; condylus occipitālis; canālis hypoglossus; fossa condylāris; processus jugulāris; processus intrajugulāris; margo lambdoidēus; sulcus sinus sigmoidei; sulcus sinus petrōsi inferiōris; pars laterālis; fossa occipitālis superior.

5. Os parietāle: linea temporālis inferior; tuber parietāle; angūlus sphenoidālis; angūlus mastoidēus; sulci arteriōsi; margo sagittālis; angūlus occipitālis; foveolae granulāres.

MORPHOLOGY

LESSON 3

§ 8. Latin noun

Latin anatomical terms involve mainly two parts of speech: nouns and adjectives.

Example: deep muscle of the tongue
adjective noun noun

petrous part of the occipital bone
adjective noun adjective noun

Latin nouns have the following grammar categories:

- 1) gender (*genus*);
- 2) number (*numērus*);

- 3) case (*casus*);
 - 4) declension.

1. Latin nouns may be of **three genders**:

masculīnum – masculine – m;

feminīnum – feminine – f;

neutrum – neuter – n.

Gender of Latin nouns can not change and **must be memorized** together with the noun.

rib – costa, ae **f**; *nose* – nasus, i **m**; *opening* – forāmen, īnis **n**

The gender of Latin nouns is mostly determined by the ending of Nominal Singular (the primary form of the noun). Thus, most nouns having the following Nominative endings refer to the specific gender:

<i>Nominative ending</i>	<i>gender</i>	<i>example</i>
-a	feminine (f)	<i>lamīna</i> , <i>ae f</i> (plate); <i>vertēbra</i> , <i>ae f</i> (vertebra);
-us	masculine (m)	<i>muscūlus</i> , <i>i m</i> (muscle), <i>arcus</i> , <i>us m</i> (arch)
-um; -on; -en; -u	neuter (n)	<i>ligamentum</i> , <i>i n</i> (ligament), <i>forāmen</i> , <i>īnis n</i> (opening), <i>ganglion</i> , <i>ii n</i> (nerve node), <i>cornu</i> , <i>us n</i> (horn)

2. There are **two numbers** in Latin:

Singulāris – singular

Plurālis - plural

In English the plural is formed by the ending *-s* or *-es*. In Latin the ending of the plural varies depending on the concrete term and according to the gender and declension:

muscles of the eyes and nose – *muscūli oculōrum* et *nasi*

parts of the body – partes corpōris

3. Case is defined as the change of the noun form according to its relation to other words in the term. There are six **cases** in Latin (in English there are only common case and possessive case). But only two cases are used in medical anatomical terminology: **Nominativus** (Nominative) and **Genetivus** (Genitive).

Nota bene! To determine the case of the noun in the term you should find there preposition «of».

Nominative case includes all the words that stand **before «of»** and answer the questions «**who, what**».

Genitive case includes all the words that are placed **after «of»** and answer the questions **«whose, of what»**.

Example: body of the incus
 Nominative Singular Genitive Singular

thoracic nerves of the pterygoid canal
 Nominative Plural Genitive Singular

If the term has no preposition «of» it means there is no Genitive part, so only Nominative part.

deep lymphatic vessels
 Nominative Plural

Nominative case is considered the primary form of nouns and adjectives. In histological and anatomical Latin terms the first word is always the noun in Nominative case (Singular or Plural).

4. In dictionaries each Latin noun is written in its **lexical form** which consists of three elements (*patella, ae f.*).

The **first** element represents the primary form of the noun in **Nominative Singular**.

The **second** element represents the **ending of Genitive Singular**.

The **third** element shows the **gender** of the noun.

	<i>1st element</i>	<i>2nd element</i>	<i>3rd element</i>
	noun in Nominative Singular	ending of Genitive Singular	gender
<i>rib – costa, ae f</i>	costa	ae (costae)	f (feminine)
<i>eye – oculus, i m</i>	oculus	i (oculi)	m (masculine)
<i>horn – cornu, us n</i>	cornu	us (cornus)	n (neuter)

Nota bene! The full form of Genitive Singular is formed by substituting the ending of Nominative Singular (the 1st element of the lexical form) for the ending of Genitive Singular (the 2nd element of the lexical form). The part of the word without the ending is called the **stem**. Nominative and Genitive stems coincide in nouns of the first, second, fourth and fifth declensions.

vena, ae f: ven-a – ven-ae
 Nom. Sing. Gen. Sing.

septum, i n: sept-um – sept-i
 Nom. Sing. Gen. Sing.

For some nouns (mainly of the 3rd declension) the second element of the lexical form contains not only the ending of Genitive Singular but also a part of their stem. It takes place when there is alteration of vowels or consonants in the stem of a noun.

thorax, acis m: thorax – thorac-is
 Nom. Sing. Gen. Sing.

margo, inis m: margo – margi-n-is
 Nom. Sing. Gen. Sing.

If a noun in Nominative Singular has only one syllable, the full form of Genitive Singular is given in its lexical form:

os, ossis n (*bone*); os, oris n (*mouth*); dens, dentis m (*tooth*); pars, partis f (*part*).
Therefore, it's necessary to memorize all the elements of the lexical form of a noun.

5. Latin nouns have five declensions. Each noun belongs to some declension and can't change it.

The **declension of the noun** is determined by the **ending of Genitive Singular** (the **second element of its lexical form**).

-ae	-i	-is	-us	-ei
I	II	III	IV	V
<i>Lexical Form</i>	<i>Nominative Singular</i>	<i>Genitive Singular</i>	<i>Declension</i>	
fovea, ae f	fove-a	fove-ae	I	
nasus, i m	nas-us	nas-i	II	
rectum, i n	rect-um	rect-i	II	
index, īcis m	index	indīc-is	III	
cutis, is f	cut-is	cut-is	III	
meātus, us m	meāt-us	meāt-us	IV	
genu, us n	gen-u	gen-us	IV	
superficies, ēi f	superfici-es	suparfici-ēi	V	

§ 9. Structure of anatomical terms

Anatomical terms may consist of one word, two words, three words, etc.

One-word terms are nouns in the nominative singular or plural, e.g., *atlas*, *atlas, first cervical vertebra*; *pes, foot*; *vasa, vessels*; *ossa, bones*.

Multi-word terms start with the noun in Nominative Singular or Plural. Then follow the words which characterize this noun. They may be presented by another noun (or nouns) in Genitive Singular or Plural or an adjective (or adjectives). So multi-word terms may be presented by several variants:

- a) noun + noun (or nouns): *corpus vertēbrae* (*body of the vertebra*);
- b) noun + adjective (or adjectives): *vertēbra cervicālis* (*cervical vertebra*);
- c) noun + noun + adjective: *muscūlus capītis longus* (*long muscle of the head*).

The first variant of multi-word terms is «**noun+noun**». While translating this type of terms you should follow the scheme:

Let's translate the term «**arch of the rib**»

1) divide the term into Nominative and Genitive parts. The first noun (before «of») is always Nominative; the second noun (after «of») is always Genitive.

arch of the rib
Nominative Genitive

2) write the lexical form of each word; determine the declension, case and number.

Remember!!! We always start translating from the Nominative noun.

noun 1	arch	arcus, us m	IV; Nominative Singular	arcus
noun 2	rib	costa, ae f	I; Genitive Singular	costae

arch of the rib – arcus costae

If the term contains several Genitive nouns, they are placed according to the English sequence.

Let's translate the term «**surface of the tubercle of the rib**»

1) divide into Nominative and Genitive and make the correct order:

1 2 3
surface of the tubercle of the rib
Nom. Sing. Gen. Sing. Gen. Sing.

2) write the lexical form of each word; determine the declension, case and number.

noun 1	surface	facies, ēi f	V; Nominative Singular	facies
noun 2	tubercle	tubercūlum, i n	II; Genitive Singular	tubercūli
noun 3	rib	costa, ae f	I; Genitive Singular	costae

surface of the tubercle of the rib – facies tuberculi costae

Lexical minimum № 1

I declension nouns

- | | |
|--------------------|----------------------|
| 1. ala, ae f | wing |
| 2. arteria, ae f | artery |
| 3. costa, ae f | rib |
| 4. crista, ae f | crest |
| 5. fissūra, ae f | fissure, narrow slit |
| 6. fossa, ae f | shallow depression |
| 7. fovea, ae f | small pit |
| 8. incisūra, ae f | notch |
| 9. lamīna, ae f | plate |
| 10. linea, ae f | line |
| 11. scapūla, ae f | shoulder blade |
| 12. vena, ae f | vein |
| 13. vertēbra, ae f | vertebra |

II declension nouns

- | | |
|---------------------|----------------|
| 14. collum, i n | neck |
| 15. sulcus, i m | groove; furrow |
| 16. tubercūlum, i n | tubercle |

III declension nouns

17. atlas, atlantis m	<i>first cervical vertebra, atlas</i>
18. axis, is m	<i>second cervical vertebra, axis</i>
19. caput, ītis n	<i>head</i>
20. corpus, ör̄is n	<i>body</i>
21. forāmen, īnis n	<i>opening</i>
22. os, ossis n	<i>bone</i>
23. thorax, ācis m	<i>chest</i>

IV declension nouns

24. arcus, us m	<i>arch</i>
25. processus, us m	<i>process</i>

V declension nouns

26. facies, ēi f	<i>surface; face</i>
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EXERCISES

1. Make the full form of Genitive Singular, underline the Genitive ending and determine the declension:

Model: costa – costae f - I

a) vertēbra, ae f; corpus, ör̄is n; dorsum, i n; arcus, us m; superficies, ēi f; basis, is f; collum, i n; apex, īcis m; cranium, ii n; ductus, us m; caput, ītis n; ganglion, ii n; cornu, us n; squama, ae f; facies, ēi f; zygōma, ātis n; processus, us m; tubercūlum, i n; thorax, ācis m; tractus, us m; atlas, antis m; axis, is m; dorsum, i n; genu, us n;

b) fovea, ae f; arcus, us m; duodenum, i n; tractus, us m; facies, ēi f; pancreas, ātis n; muscūlus, i m; recessus, us m; axis, is m; genu, us n; tuberositas, ātis f; ala, ae f; plexus, us m; ramus, i m; cerēbrum, i n; incisūra, ae f; forāmen, īnis n; sulcus, i m; fossa, ae f; crista, ae f; dens, dentis m; apex, īcis m; os, ossis n; cavītas, ātis f; angūlus, i m; costa, ae f.

2. Add the genitive singular ending according to the given declension:

tubercūlum, tubercūl... (II); nervus, nerv... (II); caput, capīt... (III); arcus, arc... (IV); atlas, atlant... (III); forāmen, foramīn... (III); costa, cost... (I); crista, crist... (I); collum, coll... (II); arteria, arteri... (I); os, oss... (III); vertēbra, vertēbr... (I); hiātus, hiāt... (IV); os, or... (III); basis, bas... (III); facies, faci... (V); margo, margin... (III); tympānum, tympān... (II); apex, apīc... (III); processus, process... (IV); canālis, canāl... (III); meātus, meāt... (IV); corpus, corpōr... (III); pars, part... (III).

3. Translate the following terms into Latin according to the model:

Model: ¹ ²

crest of the tubercle
Nom. Sing. Gen. Sing.

- 1) crest – **crista**, ae f – noun, I, Nom. Sing. – **crista**
- 2) tubercle – **tuberculum**, i n – noun, II, Gen. Sing. – **tuberculi**
- a) 1) arch of the vertebra (arcus, us m; vertebra; ae f); 2) body of the rib (corpus, ūris n; costa; ae f); 3) groove of the artery (sulcus, i m; arteria, ae f); 4) crest of the head of the rib (crista, ae f; caput, ūtis n; costa; ae f);
- b) plate of the arch of the rib; arch of the atlas; head of the rib; wing of the rib; neck of the rib; crest of the tubercle; tubercle of the rib; crest of the neck of the rib; notch of the shoulder blade.

4. Translate the following terms into English:

arcus vertebrae; caput costae; collum scapulae; collum costae; corpus costae; foramen vertebrae; tuberculum costae; sulcus venae; incisura scapulae; facies tuberculi costae.

Exercises for control reading

1. Os temporale: processus zygomaticus; tuberculum articulare; fissura petrosquamosa; fissura petrotympanica; pars tympanica; porus acusticus externus; fissura tympanomastoidea; spina suprameatica; sulcus nervi petroci minoris; sulcus nervi petroci majoris; hiatus canalis nervi petroci; eminentia arcuata; sulcus sinus sigmoides; impressio trigemini; apex partis petroceae; margo sphenoidalis; tegmen tympani; apertura externa aqueductus vestibuli; apertura externa canaliculi cochleae; meatus acusticus externus; fissura tympanosquamosa; tuberculum articulare; fossula petrosa; apertura externa canaliculi cochleae; foramen stylomastoidicum; cavum tympani; promontorium; fenestra vestibuli; fenestra cochleae; fissura petrotympanica; fissura petrosquamosa; vagina processus styloidis; canalis caroticus; prominentia canalis semicircularis lateralis; geniculum canalis facialis; semicanalis musculi tensoris tympani; semicanalis tubae auditivae; cellulae tympanicae; canaliculus chordae tympani.

2. Os ethmoidale: lamina perpendicularis; concha nasalis media; crista galli; labyrinthus ethmoidalis; lamina cribrosa; ala cristae galli; foramen caecum; concha nasalis superior; meatus nasi superior; processus uncinatus; bulla ethmoidalis.

3. Maxilla: corpus maxillae; margo infraorbitalis; facies anterior; juga alveolaria; fossa canina; incisura nasalis; spina nasalis anterior; sulcus infraorbitalis; facies infratemporalis; tuber maxillae; canalis incisivus; foramen incisivum; foramina alveolaria; canales alveolares; hiatus maxillaris; alveoli dentales; juga alveolaria; os incisivum; sutura palatina mediana; septa interradicularia; processus sphenoidalis; processus pyramidalis; lamina horizontalis; incisura sphenopalatina; fossa pterygoidaea; ala vomeris; fossa sacculi lacrimalis; hiatus lacrimalis; processus temporalis; foramen zygomaticotemporale.

4. Mandibula: basis mandibulae; processus coronoides; processus condylaris; tuberositas masseterica; sulcus mylohyoideus; septa interalveolaria; linea obliqua; protuberantia mentalis; lingula mandibulae; fossa digastrica; fovea sublingualis; os hyoideum; cornu majus; cornua majora; cornu minus; cornua minora.

5. Cranium: calvaria; basis; crista frontalis; foveola granulares; sella turcica; foramen jugulare; canalis hypoglossi; synchondrosis sphenooccipitalis; vomer; lamina horizontalis ossis palatini; orbita; processus pyramidalis ossis palatini; palatum durum; choana; condylus occipitalis; tuberculum pharyngium; canalis condylaris; foramen lacrumale; fissura tympanosquamosa; sutura sphenosquamosa; foramen palatinum minus; clivus; eminentia cruciformis; orbita; aditus orbitae; canalis nasolacrimalis; fossa sacci lacrimalis; os sphenoidale; foramen ethmoidale posterius; meatus nasi communis; apertura piriformis; recessus sphenoethmoidalis; infundibulum ethmoidale; hiatus semilunaris; lamina lateralis processus pterygoidis; processus palatinus maxillae; os lacrimalis; fonticulus anterior; anulus tympanicus; squama occipitalis.

LESSON 4

§ 10. Latin adjectives

Adjectives are words that qualify a noun and therefore they are always used with the noun.

Example: transverse ligament of the atlas
 adjective → noun noun

In all Latin terms adjectives are placed after the noun which they refer to. A Latin adjective have the same grammar categories as a Latin noun.

- | | |
|--|--|
| 1. <i>number:</i> Singular; Plural
2. <i>gender:</i> masculine; feminine; neuter
3. <i>case:</i> Nominative; Genitive etc. | are related to the noun which the
adjective qualifies |
|--|--|

Remember!!! There are only **three declensions** of adjectives. *Compare:* nouns belong to five declensions.

The lexical form of the adjective includes the following elements:

- the full primary form of the adjective in Nominative Singular with the masculine ending;
- the feminine ending;
- the neuter ending.

<i>Lexical form</i>	<i>masculine</i>	<i>feminine</i>	<i>neuter</i>	<i>1st group</i>
latus, a, um (<i>wide</i>)	lat-us	lat-a	lat-um	
dexter, tra, trum (<i>right</i>)	dext-er	dextr-a	dextr-um	<i>2nd group</i>
articularis, e (<i>articular</i>)	articulär-is	articulär-is	articulär-e	
costalis, e (<i>costal</i>)	costäl-is	costäl-is	costäl-e	

According to the lexical form Latin adjectives are divided into **two groups**.

1st group adjectives have different forms for each gender. Therefore they have three endings in their lexical form (Nominative Singular endings): endings **-us / -er** are for **masculine** gender; ending **-a** is for **feminine** gender; ending **-um** is for **neuter** gender.

English	Lexical form	m	f	n
		-us / -er	-a	-um
<i>long</i>	longus, a, um	long- us	long- a	long- um
<i>left</i>	sinister, tra, trum	sinist- er	sinistr- a	sinistr- um

The choice of the adjective ending depends on the gender of the concrete noun which the adjective qualifies.

long muscle: musculus, i **m** + long**us**, a, um = musculus long**us**

long head: caput, itis **n** + longus, a, **um** = caput long**um**

long artery: arteria, ae **f** + longus, **a**, um = arteria longa

The **declension of the first group adjectives** is determined by the **gender** of the noun which it refers to: **feminine (-a) – I**
masculine (-us / -er); neuter (-um) – II.

Example:

petrous part: pars, partis **f** + petrōsus, **a**, um = pars^{III} petrōsa^I (**f**)

deep vessel: vas, vasis **n** + profundus, a, **um** = vas^{III} profundum^{II} (**n**)

thoracic duct: ductus, us **m** + thoracīc**us**, a, um = ductus^{IV} thoracīcus^{II} (**m**)

2nd group adjectives have two endings in their lexical form (Nominative Singular endings): ending **-is** – for **masculine** and **feminine** genders; ending **-e** – for **neuter** gender.

English	Lexical form	m	f	n
		- is	- is	- e
<i>lateral</i>	laterālis, e	laterāl- is	laterāl- is	laterāl- e
<i>renal</i>	renālis, e	renāl- is	renāl- is	renāl- e

The choice of the adjective ending depends on the gender of the concrete noun which the adjective qualifies.

frontal suture: sutūra, ae **f** + frontālis, **e** = sutūra frontālis

frontal angle: angūlus, i **m** + frontālis, **e** = angūlus frontālis

vertebral tuber: tuber, ēris **n** + vertebrālis, **e** = tuber vertebrāle

The second group adjectives also include several adjectives frequently used in anatomical terms. These adjectives resemble the comparative degree of adjectives but are translated as positive adjectives:

anterior, ius *front, anterior*;

inferior, ius *lower*;

posterior, ius *back, posterior*;

major, jus *large*;

superior, ius *upper, superior*;

minor, us *small*.

These adjectives have the common ending for **masculine** and **feminine** gender **-ior(jor)**; and another ending for **neuter** gender **-ius(jus)**.

English	Lexical form	m	f	n
		- ior	- ior	- ius
<i>front</i>	anterior, ius	anter- ior	anter- ior	anter- ius
<i>large</i>	major, jus	ma- jor	ma- jor	ma- jus
<i>small</i>	minor, us	min- or	min- or	min- us

Example:

large wing: ala, ae **f** + **major**, jus = ala **major**

lower process: processus, us **m** + **inferior**, ius = processus **inferior**

upper ligament: ligamentum, i **n** + **superior**, **ius** = ligamentum **superius**

The declension of the second group adjectives is always the III-rd.

Example:

frontal suture: sutūra, ae **f** + frontālis, e = sutūra^I frontālis^{III}

upper arch: arcus, us **m** + **superior**, ius = arcus^{IV} **superior**^{III}

vertebral tuber: tuber, ēris **n** + vertebrālis, **e** = tuber^{III} vertebrāle^{III}

	1 st group			2 nd group			Comparative degree		
gender	m	f	n	m	f	n	m	f	n
Nom.sing. endings	-us, -er	-a	-um	-is	-is	-e	-ior	-ior	-ius
Declension	II	I	II	III			III		

Remember!!! Adjectives agree with the noun they qualify in gender, number and case.

§ 11. Structure of anatomical terms

As you remember multi-word terms may occur in several variants:

- a) noun + noun;
- b) noun + adjective;
- c) noun + noun + adjective.

Now let's see the anatomical terms of the types «noun + adjective» and «noun + noun + adjective».

Noun + adjective. In the term consisting of a noun and an adjective, the **adjective** takes the **second** position.

Let's translate «palatine opening»:

- 1) make the correct order of the words

2 1
palatine opening
adj. Nom. Sing noun Nom. Sing.

- 2) write the lexical form of each word and their grammar categories:

<i>English</i>	<i>Lexical forms</i>	<i>Grammar categories</i>	<i>Translation</i>
opening	forāmen, īnis n	noun, III, Nom. Sing.	forāmen
palatine	palatīnus, a, um	adj., n, II, Nom. Sing.	palatīnum

palatine opening – forāmen palatīnum

In the term consisting of a noun and several adjectives, the noun occupies the first position. Then goes the adjective referring to an organ or part of the body (*articular, pulmonary, cerebral, ect.*). Then goes the adjective determining the size (*large, small*), form (*round, sphenoid, ect.*) and position (*upper, anterior, lower, etc.*).

3 2 1
right temporal bone
adj. N.S. adj. N.S. noun, N.S.

bone	os, ossis n	noun, III, Nom. Sing.	os
temporal	temporālis, e	adj., n, III, Nom. Sing.	temporāle
right	dexter, tra, trum	adj., n, II, Nom. Sing.	dextrum

right temporal bone – os temporāle dextrum

Noun + noun + adjective. If the term contains two nouns and the adjective, first goes Nominative noun, the second place is taken by Genitive noun or the adjective.

3 1 2
transverse nerve of the neck
Nom. adj. Nom. noun Gen. noun

nerve	nervus, i m	noun, II, Nom. Sing.	nervus
neck	collum, i n	noun, II, Gen. Sing.	colli
transverse	transversus, a, um	adj., m, II, Nom. Sing.	transversus

transverse nerve of the neck – nervus colli transversus

Lexical minimum № 2

1st group adjectives

- | | | |
|-----|---------------------|-------------------------------|
| 1. | carotīcus, a, um | <i>carotic</i> |
| 2. | coccygēus, a, um | <i>coccygeal</i> |
| 3. | dexter, tra, trum | <i>right</i> |
| 4. | externus, a, um | <i>external</i> |
| 5. | internus, a, um | <i>internal</i> |
| 6. | ischiadīcus, a, um | <i>ischiadic</i> |
| 7. | medius, a, um | <i>middle</i> |
| 8. | palatīnus, a, um | <i>palatine</i> |
| 9. | pterygoideus, a, um | <i>pterygoid, wing-shaped</i> |
| 10. | sinister, tra, trum | <i>left</i> |
| 11. | thoracīcus, a, um | <i>thoracic</i> |
| 12. | transversus, a, um | <i>transverse</i> |

2nd group adjectives

13. articulāris, e	<i>articular</i>
14. costālis, e	<i>costal</i>
15. dorsālis, e	<i>dorsal</i>
16. frontālis, e	<i>frontal</i>
17. horizontālis, e	<i>horizontal</i>
18. jugulāris, e	<i>jugular</i>
19. laterālis, e	<i>lateral</i>
20. mediālis, e	<i>medial</i>
21. spinālis, e	<i>spinal</i>
22. vertebrālis, e	<i>vertebral</i>

Comparative adjectives

23. anterior, ius	<i>front, anterior</i>
24. inferior, ius	<i>lower</i>
25. major, jus	<i>larger</i>
26. minor, minus	<i>smaller</i>
27. posterior, ius	<i>back, posterior</i>
28. superior, ius	<i>upper</i>

EXERCISES

1. Complete the lexical form of the following adjectives:

coccygēus,...; dorsālis...; major,...; profundus...; laterālis...; dexter,...; vertebrālis,...; minor,...; sinister,...; mediānus,...; costālis...; externus,...; superior,...; lumbālis,...; internus.... .

2. Make the form of neuter gender of the following adjectives:

occipitālis, externus, spinōsus, inferior, profundus, dorsālis, posterior, laterālis, distālis, minor, sinister.

3. Make the form of feminine gender of the following adjectives:

internus, minor, thoracīcus, articulāris, major, coccygēus, dexter, superior, claviculāris, cibrōsus, costālis, transversus.

4. Agree adjectives with the nouns in gender:

Model: *ala, ae f (minor, us) – ala minor (f)*

incisūra, ae f (frontālis, e); os, ossis n (frontālis, e); arcus, us m (anterior, ius); tubercūlum, i n (anterior, ius); canālis, is m (vertebrālis, e); forāmen, īnis n (vertebrālis, e); columnā, ae f (vertebrālis, e); processus, us m (transversus, a, um); sinus, us m (transversus, a, um); linea, ae f (transversus, a, um); facies, ēi f (articulāris,e); ramus, i m (laterālis, e); nervus, i m (sensorius, a, um); arteria, ae f (anterior, ius); corpus, ūris n (ciliāris, e).

5. Make the terms (noun + adjective) and determine the declension of each word:

Model: *facies*, *ei f* (*articularis*, *e*) – *facies^V* *articularis^{III}*

a) ala, ae f (major, jus); os, ossis n (occipitālis, e); sinus, us m (occipitālis, e); protuberantia, ae f (internus, a, um); cornu, us n (coccygēus, a, um); pars, partis f (petrōsus, a, um); cornu, us n (inferior, ius);

b) costa, ae f (primus, a, um); forāmen, īnis n (posterior, ius); forāmen, īnis n (magnus, a, um); vertēbra, ae f (thoracīcus, a, um); fovea, ae f (costālis, e); nervus, i m (spinālis, e); margo, īnis m (squamōsus, a, um); concha, ae f (superior, ius); cornu, us n (laterālis, e).

6. Translate into English:

incisūra frontālis; processus articulāris superior; fovea costālis inferior; facies articulāris capītis costae; facies costālis; fissūra horizontālis; forāmen palatīnum minus; incisūra inferior; incisūra vertebrālis; fovea costālis superior; arcus posterior atlantis.

7. Translate into Latin:

transverse fissure; frontal crest; lower notch; plate of the arch of the vertebra; articular process of the vertebra; upper vertebral notch; anterior ligament of the atlas; upper articular process; transverse line; pterygoid process; palatine opening.

LESSON 5

§ 12. Derivative adjectives

Most adjectives in anatomical terminology are derivatives, i.e. they are formed from the noun by means of some suffixes.

First class adjectives are formed by the following suffixes:

Prefix	Meaning	Example
-īc-, -īn-, -ē-	relation to some anatomical structure	gastr-īc-us, a, um <i>gastric, related to the stomach;</i> pancreat-īc-us, a, um <i>pancreatic, related to the pancreas;</i> pelv-īn-us, a, um <i>pelvic, related to the pelvis;</i> oss-ē-us, a, um <i>bony</i>
-ōs-	plenty of some feature	squam-ōs-us,a,um <i>scaly, having plenty of scale;</i> fibr-ōs-us,a,um <i>fibrous, having plenty of fiber;</i> muc-ōs-us,a,um <i>mucous, having plenty of mucus</i>
-idē-	likeness with something	pterygo-idē-us, a, um <i>pterigoid, like the wing;</i> lambdo-idē-us, a, um <i>lambdoid, like the Greek letter Λλ;</i> sigmo-idē-us, a, um <i>sigmoid, having the form of the Greek letter Σς;</i>
-āt-	supplied with something	ham-āt-us,a,um <i>supplied with hooks</i>

Most **second group adjectives** are formed from appropriate nouns according to the following model: [noun's stem + suffix **-āl** or **-ār**]:

frons, ntis f (*forehead*) – front-**āl**-is, e (*frontal*)
clavicula, ae f (*clavicle*) – clavicul-**ār**-is, e (*clavicular*)

§ 13. Compound adjectives

Compound adjectives are the adjectives consisting of two stems and used for denoting ligaments, vessels, nerves, canals etc. Such adjectives are formed by joining the root element of the first adjective to the stem of the second adjective with the help of the connective vowel **-o-**. The ending of the compound adjective is the same as the ending of the second adjective. In other words, we take the root element of the first adjective and add it to the full form of the second adjective: sphenoidālis (*sphenoid*) + frontālis (*frontal*) = sphen-o-frontālis, e *sphenofrontal*; sphenoidālis (*sphenoid*) + zygomaticūs, a, um (*zygomatic*) = sphen-o-zygomaticūs, a, um *sphenozygomatic*.

§ 14. Primary data about prefixes

Prefixes are used to denote the exact position of the anatomical structure. In anatomical terms prefixes of Latin origin are the most widely used.

Remember the meaning of the most widely used prefixes:

infra-	sub-	under, beneath	<u>infraclaviculāris</u> — infraclavicular (<i>situated under clavicle</i>)
inter-		between	<u>intervertebrālis</u> — intervertebral (<i>situated between vertebrae</i>)
intra-		inside	<u>intravenōsus</u> — intravenous (<i>lying inside the vein</i>)
pre- (prae-)		in front of	<u>presacrālis</u> — presacral (<i>situated in front of sacrum</i>)
semi-		half	<u>semilunāris</u> — semilunar (<i>looking like half of the moon</i>)
supra-		above	<u>suprascapulāris</u> — suprascapular (<i>situated above shoulder-blade</i>)

Lexical minimum № 3

	<i>Prefixes</i>
1. infra- sub-	<i>under, beneath</i>
2. inter-	<i>between</i>
3. intra-	<i>inside</i>
4. pre- (prae-)	<i>in front of</i>
5. semi-	<i>half</i>
6. supra-	<i>above</i>
	<i>Adjectives</i>
7. cribrōsus, a, um	<i>cribrate, sieve-shaped</i>
8. ethmoidālis, e	<i>ethmoid, sieve-shaped</i>

9. hyoideus, a, um	<i>hyoid (bone)</i>
10. hypoglossus, a, um	<i>hypoglossal (nerve)</i>
11. mastoideus, a, um	<i>mastoidal, mammiform</i>
12. occipitalis, e	<i>occipital</i>
13. orbitalis, e	<i>orbital</i>
14. osseus, a, um	<i>bony</i>
15. parietalis, e	<i>parietal</i>
16. petrosus, a, um	<i>petrous, stony</i>
17. sacralis, e	<i>sacral</i>
18. sphenoidalis, e	<i>sphenoidal, wedge-shaped</i>
19. spinosus, a, um	<i>spinous</i>
20. squamosus, a, um	<i>squamous, scaly</i>
21. sternalis, e	<i>sternal, related to the breast bone</i>
22. styloideus, a, um	<i>styloid, awl-shaped</i>
23. temporalis, e	<i>temporal</i>
24. tympanicus, a, um	<i>tympanic</i>
25. zygomaticus, a, um	<i>zygomatic</i>
	<i>Nouns</i>
26. spina, ae f	<i>spine</i>
27. squama, ae f	<i>squama, scale</i>
28. sternum, i n	<i>breast-bone</i>
29. sutura, ae f	<i>suture, seam</i>
30. zygoma, ätis n	<i>zygoma, cheek-bone</i>

EXERCISES

1. Translate the following adjectives into English. Find the suffixes and nouns from which the adjectives are formed:

venösus, nervösus, arteriösus, spinosus, cribrösus, squamosus, cartilaginēus, gastricus, hepaticus, pancreaticus, tympanicus, thoracicus, palatinus, coccygēus, zygomaticus, pelvīnus, arcuātus.

(Nouns: arteria, ae f *artery*; vena, ae f *vein*; nervus, i m *nerve*; spina, ae f *spine*; cribrum, i n *sieve*; squama, ae f *scale*; cartilago, īnis f *cartilage*; gaster, tris f *stomach*; hepar, ätis n *liver*; pancreas, ätis n *pancreas*; tympanum, i n *tympanum*; thorax, äcis m *chest*; palatum, i n *palate*; coccyx, ygis m *coccyx*; zygoma, ätis n *cheek-bone*; pelvis, is f *pelvis*; arcus, us m *arch*).

2. Translate the following adjectives; explain the meaning of the prefixes:

intercostalis, e; intervertebralis, e; interarticulär, e; infratemporalis, e; infraorbitalis, e; infrascapularis, e; subarcuatus, a, um; subscapularis, e; intraarticularis, e; semicirculär, e; supraorbitalis, e.

3. Agree the adjectives with the nouns. Determine the declension of each word. Translate the word combinations into English:

a) sutura, ae f (sphenozygomaticus, a, um); fissura, ae f (orbitalis, e; superior, ius); foramen, īnis n (stylomastoideus, a, um); foramen, īnis n (supraorbitalis, e); margo, īnis m (supraorbitalis, e); sulcus, i m

(pterygopalatinus, a, um); articulatio, ōnis f (atlantoaxialis, e); ligamentum, i n (sacrococcygēus, a, um); ligamentum, i n (intraarticulāris, e); discus, i m (intervertebrālis, e);

b) linea, ae f (temporālis, e; inferior, ius); ligamentum, i n (anterior, ius); forāmen, īnis n (ethmoidālis, e; anterior, ius); incisūra, ae f (ethmoidālis, e); membrana, ae f (atlantooccipitālis, e; posterior, ius); fissūra, ae f (tympanomastoideus, a, um).

4. Translate into English:

forāmen stylomastoidēum; muscūlus semispinalis thorācis; sutūra intermaxillāris; crista infratemporālis; fossa subscapulāris; lamīna cibrōsa dextra; spina scapulae; os hyoideum.

5. Translate into Latin:

infratemporal crest; mastoidal opening; spinous process of the vertebra; mastoidal process; frontal process; petrous opening; frontozygomatic suture; jugular notch of the breast-bone; sieve-shaped bone; spinous process; anterior ethmoid opening; upper temporal line.

LESSON 6

§ 15. First declension nouns and adjectives

First declension nouns are mostly of the **feminine** gender. They have the ending **-a** in Nominative Singular (the 1st element of the lexical form) and the ending **-ae** in Genitive Singular (the 2nd element of the lexical form).

For example: vertēbra, ae f *vertebra*; scapūla, ae f *shoulder blade*; incisūra, ae f *notch*; squama, ae f *squama, scale*.

lexical form	Nom. Sing.	Gen. Sing.	gender
	- a	- ae	f
costa, ae f (<i>rib</i>)	cost-a	cost-ae	f
vena, ae f (<i>vein</i>)	ven-a	ven-ae	f

Exception: Nouns of Greek origin ending in **-ma** are of the **neuter** gender and refer to the **III**-rd declension:

zygōma, ātis n *zygoma, cheek bone*; glaucōma, ātis n *increase of intraocular pressure*.

First declension adjectives are the adjectives of the **first group** (-us/-er; -a; -um) if they agree with a noun of the **feminine** gender and get the ending **-a** in Nominative Singular.

lexical form	gender
verus, a, um	f
sinister, tra, trum	f

First declension nouns and adjective have the same case endings. While declining nouns or adjectives we change case endings.

<i>true rib</i>		<i>costa</i>	<i>vera</i>
<i>Nom. Sing.</i>	-a	cost-a	ver-a
<i>Gen. Sing.</i>	-ae	cost-ae	ver-ae
<i>Nom. Plur.</i>	-ae	cost-ae	ver-ae
<i>Gen. Plur.</i>	-ārum	cost-ārum	ver-ārum

First declension nouns of Greek origin

The first Greek declension includes nouns of the feminine gender having the ending **-e** and nouns of the masculine gender having the ending **-es** in Nominative Singular.

For example: *chole*, es f *bile*; *systōle*, es f *systole*, *rhythrical contraction of heart ventricles*; *raphe*, es f *suture, seam*; *diabētes*, ae m *diabetes*; *ascītes*, ae m *dropsy of abdominal cavity*.

	Sing.		Plur.	
Nom.	systōl-e	ascīt-es	systōl-ae	ascīt-ae
Gen.	systōl-es	ascīt-ae	systol-ārum	ascīt-ārum

Translating the anatomical term into Latin you should follow the following scheme:

1) divide the term into Nominative part (before «of») and Genitive (after «of») part; define number (Singular or Plural);

2) make the order:

1 — Nominative noun;

2 — Genitive noun;

3 — adjective.

3) write the lexical forms of each word

noun: declension;

 Nominative or Genitive

 Singular or Plural

adjective: gender (= gender of the noun)

 declension

 Nominative or Genitive

 Singular or Plural

joining of the eyelids — comissūra palpebrārum

joining of the eyelids

Nom. Sing.

Gen. Plur.

1. the term has preposition «of», so *joining* is Nominative Singular and *eyelids* — Genitive Plural

2. making the order:

<u>joining</u> of the eyelids		1 — Nominative noun (joining) 2 — Genitive noun (eyelids)
<i>joining</i> : comissūra, ae f – noun; I; Nom. Sing.	comissūra	3. write the lexical forms of each noun
<i>eyelid</i> : palpebra, ae f – noun; I; Gen. Plur.	palpebrārum	<i>noun</i> : declension; Nominative or Genitive Singular or Plural
		<i>palatine folds</i> — <i>plicae palatīnae</i>
<u>palatine folds</u> Nom. Plur.		1. the term has no preposition «of», so there is only Nominative part (Nom. Plur.)
2 1		2. make the order:
palatine folds		1 — Nominative noun (folds) 2 — adjective (palatine)
<i>fold</i> :		3. write the lexical forms of each word
<i>plica</i> , ae f – noun; I; Nom. Plur.	<i>plicae</i>	<i>noun</i> : declension; Nominative or Genitive Singular or Plural
<i>palatine</i> :		<i>adjective</i> : gender (= gender of the noun) declension
palatīnus, a, um – adj.; f; I; Nom. Plur.	palatīnae	Nominative or Genitive Singular or Plural

Lexical minimum № 4

1. apertūra, ae f	<i>aperture</i>
2. bursa, ae f	<i>bag</i>
3. cavus, a, um	<i>hollow</i>
4. clavicūla, ae f	<i>clavicle</i>
5. clavicolāris, e	<i>clavicular</i>
6. commissūra, ae f	<i>joining, commissure</i>
7. concha, ae f	<i>concha</i>
8. fascia, ae f	<i>fascia</i>
9. fibūla, ae f	<i>splint-bone</i>
10. lingua, ae f	<i>tongue</i>
11. mandibūla, ae f	<i>lower jaw</i>
12. mandibulāris, e	<i>mandibular, related to the lower jaw</i>
13. maxilla, ae f	<i>upper jaw</i>
14. maxillāris, e	<i>maxillary, related to the upper jaw</i>
15. mucosa, ae f	<i>mucous membrane</i>
16. mucosus, a, um	<i>mucous</i>
17. patella, ae f	<i>knee-pan</i>
18. plica, ae f	<i>fold</i>

19. palpēbra, ae f	<i>eyelid</i>
20. profundus, a, um	<i>deep</i>
21. raphe, es f	<i>raphe</i>
22. substantia, ae f	<i>substance</i>
23. tibia, ae f	<i>shin-bone</i>
24. tonsilla, ae f	<i>tonsil</i>
25. tunīca, ae f	<i>covering, membrane</i>
26. ulna, ae f	<i>elbow bone</i>
27. verus, a, um	<i>true</i>
28. vesīca fellea, ae f	<i>gall bladder</i>

EXERCISES

1. Make the combinations with each adjective. Translate the word combinations:

linea, ae f (transversus, a, um; posterior, ius); substantia, ae f (musculāris, e; compactus, a, um); vena, ae f (linguālis, e; superior, ius; profundus, a, um); vertēbra, ae f (cervicālis, e; thoracīcus, a, um); lamīna, ae f (cribrōsus, a, um; anterior, ius; laterālis, e); arteria, ae f (dexter, tra, trum; intercostālis, e; inferior, ius); tunīca, ae f (mucōsus, a, um; musculāris, e).

2. Decline the following word combinations:

- a) vena cava (*hollow vein*); arteria dextra (*right artery*); cellūla nervōsa (*nerve cell*);
- b) crista palatīna (*palatine crest*), incisūra profunda (*deep notch*), vertēbra thoracīca (*thoracic vertebra*), linea transversa (*transverse line*).

3. Group multi-word terms: 1) «noun₁ + noun₂»; 2) «noun + adjective»; 3) «noun + adjective₁ + adjective₂»; 4) «noun₁ + noun₂ + adjective». Translate the terms into English:

a) vertēbra thoracīca; ala costae; incisūra scapūlae; incisūra scapūlae profunda; linea transversa; corpus vertēbrae; apertūra thorācis superior; clavicūla dextra; vena cava superior; plica venae cavae sinistrale; arteria palatīna major.

b) vertēbrae thoracīcae; vena linguae profunda; scapūla sinistra; vena palatīna externa; sinus venārum cavārum; lamīna cribrōsa dextra; plicae tunīcae mucōsae vesīcae felleae; bursa mucōsa ischiadīca; lamīna propria mucōsae.

4. Translate into Latin giving the lexical form of each word. Mind the word order in the terms:

a) true rib; wing of the rib; body of the vertebra; internal thoracic veins; crest of the head of the rib; notch of the lower jaw; lower vertebral notch; deep notch of the shoulder-blade; coccygeal vertebrae; transverse line; fissure of the eyelids;

b) upper orbital fissure; true ribs; body of the thoracic vertebra; spinous process of the thoracic vertebra; upper aperture of the chest; fold of the left hol-

low vein (*vena cava*); mucous membrane of the tongue; shallow depression of the gallbladder; body of the upper jaw; joining of the eyelids; upper mucous bag.

LESSON 7

§ 16. Second declension nouns and adjectives

Second declension nouns are of the **masculine** and **neuter** gender. They have endings **-us / -er** for masculine gender and **-um / -on** for neuter gender in Nominative Singular and ending **-i** in Genitive Singular.

<i>Lexical form</i>	<i>Nom. Sing.</i>	<i>Gen. Sing.</i>	<i>gender</i>
	- us / er		m
	- um / - on	- i	n
nervus, i m (<i>nerve</i>)	nerv-us	nerv-i	m
collum, i n (<i>neck</i>)	coll-um	coll-i	n
ganglion, ii n (<i>nerve node</i>)	gangli-on	gangli-i	n

Second declension adjectives are the adjectives of the **first group** (-us/-er; -a; -um) if they agree with nouns of the **masculine** gender getting endings **-us** or **-er** or nouns of the **neuter** gender getting the ending **-um** in Nominative Singular.

<i>Lexical form</i>	<i>Gender</i>	<i>Nom. Sing.</i>
longus, a, um	m	long-us
	n	long-um
dexter, tra, trum	m	dext-er
	n	dextr-um

Example:

processus, us **m** (*mastoideus*, a, um) — processus (IV) *mastoideus* (II)

pulmo, ūnis **m** (*dexter*, tra, trum) — pulmo (III) *dexter* (II)

cornu, us **n** (*coccygēus*, a, **um**) — cornu (IV) *coccygēum* (II)

Second declension nouns and adjective have the following case endings:

	<i>m</i>	<i>n</i>	<i>right eye (m)</i>	<i>wide septum (n)</i>
<i>Nom. Sing.</i>	-us; -er	-um; -on	<i>ocul-us dext-er</i>	<i>sept-um lat-um</i>
<i>Gen. Sing.</i>	-i	-i	<i>ocul-i dextr-i</i>	<i>sept-i lat-i</i>
<i>Nom. Plur.</i>	-i	-a	<i>ocul-i dextr-i</i>	<i>sept-a lat-a</i>
<i>Gen. Plur.</i>	-ōrum	-ōrum	<i>ocul-ōrum dextr-ōrum</i>	<i>sept-ōrum lat-ōrum</i>

Nota bene! Neuter nouns and adjectives in **Nom. Plur.** have the ending **-a**.

Exception:

In medical terminology the word *virus*, *i n microbial poison* refers to neuter gender.

Nouns ending in **-us** denoting names of **trees** are always of the feminine gender: *Pinus*, i f *pine*; *Eucalyptus*, i f *eucalyptus*.

Lexical minimum № 5

1. acromion, ii n	<i>acromion, lateral end of the shpulder blade crest</i>
2. angūlus, i m	<i>angle</i>
3. atrium, i n	<i>atrium (heart chamber)</i>
4. brachium, i n	<i>shoulder</i>
5. bulbus, i m	<i>bulb</i>
6. bulbus oc̄uli	<i>eyeball</i>
7. cavum, i n	<i>cavity</i>
8. cerēbrum, i n	<i>brain</i>
9. cranium, i n	<i>skull</i>
10. digitus, i m	<i>finger</i>
11. dorsum, i n	<i>back</i>
12. encephālon, i n	<i>large brain</i>
13. humērus, i m	<i>upper arm</i>
14. labium, ii n	<i>lip</i>
15. latus, a, um	<i>wide, broad</i>
16. ligamentum, i n	<i>ligament</i>
17. lobus, i m	<i>lobe</i>
18. longus, a ,um	<i>long</i>
19. muscūlus, i m	<i>muscle</i>
20. nasus, i m	<i>nose</i>
21. nervus, i m	<i>nerve</i>
22. nodus, i m	<i>node</i>
23. oc̄ulus, i m	<i>eye</i>
24. ophthalmīcus, a, um	<i>ophthalmic, related to the eye</i>
25. optīcus,a,um	<i>optic, visual</i>
26. palātum, i n	<i>palate</i>
27. radius, i m	<i>radius, forearm bone</i>
28. ramus, i m	<i>branch</i>
29. rectus, a, um	<i>straight</i>
30. septum, i n	<i>dividing wall, septum</i>
31. uterus, i m	<i>uterus, womb</i>
32. ventricūlus, i m	<i>ventricle (heart chamber)</i>

EXERCISES

1. Find second declension nouns:

processus, us m; collum, i n; forāmen, īnis n; sulcus, i m; tubercūlum, i n; arcus, us m; humērus, i m; brachium, i n; corpus, ḍoris, n; cerēbrum, i n; meātus, us m; ventricūlus, i m; pectus, ḍoris n; ramus, i m; sinus, us m; cavum, i n; digītus, i m; tempus, ḍoris n; ductus, us m; encephālon, i n.

2. Make up the word combinations with each noun. Underline all the words of the second declension. Translate the terms into English:

ventricūlus, i m; arteria,ae f; nervus, i m (sinister, tra, trum);
sulcus, i m; ligamentum, i n; arteria, ae f (anterior, ius);
processus, us m; incisūra, ae f; forāmen, īnis n (vertebrālis, e).

3. Translate the following terms into Latin. Define the declension and decline them:

- transverse groove; deep artery; wide ligament.
- left lobe; thoracic vertebra; long neck.

4. Choose the necessary ending in Nom. Sing. Translate the word combinations into English:

tubercūlum poster (-ior, -ius) atlantis;
ligamentum venōs (-us, -a, um);
sulcus temporāl (-is, -e) super (-ior, -ius);
nervus transvers (-us, -a, um);
nervus ophthalmīc (-us, -a, um) profund (-us, -a, um).

5. Translate into Latin minding the agreement of nouns and adjectives:

transverse (groove, ligament, artery); wide (fascia, ligament, muscle); left (eye, atrium, small pit); external (membrane, groove); deep (vein, small pit, nerve); long (muscle, artery, neck); right (shoulder, ventricle, shoulder blade); carotic (tubercl, groove, artery); bony (substance, dividing wall).

6. Group multi-word terms: 1) «noun₁ + noun₂»; 2) «noun + adjective»; 3) «noun₁ + noun₂ + adjective». Translate the terms into English:

a) bulbus ocūli; spina scapūlae; nervus transversus; bronchus sinister; sulci nervōrum; atrium dextrum; nervus ophthalmīcus profundus; facies articulāris acromii; collum radii;

b) septum nasi; crista tubercūli; angūlus sterni; ligamentum sternoclaviculāre; angūlus scapūlae inferior; fovea costālis processus transversi; tubercūlum minus humēri; ligamenta digitōrum; angūlus mastoideus; ligamenta transversa; angūlus laterālis scapūlae; muscūli dorsi recti; sulcus nervi; lobus dexter et sinister.

7. Translate the terms into Latin giving lexical forms of each word:

a) angle of the eye; back of the tongue; transverse ligaments; branches of the internal thoracic artery; septum of the ventricles and atria; right atrium; angle

of the rib; neck of the gallbladder; left ventricle; carotic tubercle; grooves of nerves; muscles of the tongue; ligaments of the skull.

b) tubercle of the rib; body of the breast-bone; neck of the shoulder blade; small tubercle; head of the upper arm; optic nerve; ophthalmic nerve; transverse ligament of the atlas; lower angle of the shoulder blade; wide ligament of the shoulder blade; muscles of the neck; grooves of the large brain; posterior branch of the left ventricle; palatine process of the upper jaw; deep branch of the transverse artery of the neck; grooves of the transverse nerve.

LESSON 8

§ 17. Third declension nouns

Third declension nouns have some peculiarities which effect their declining.

1. The third declension includes nouns of all **three genders**: masculine (m), feminine (f) and neuter (n). There are many different endings in Nominative Singular (more than 30). But all of them have the **common ending in Genitive Singular -is**.

margo, īnis m (*border*); pars, partis f (*part*); tuber, ēris n (*tuber*)

Gender	Nominative Singular	Genitive Singular
m, f, n	various endings	-is

2. Third-declension nouns may have **three variants of their lexical form** according to the Genitive Singular form.

1) The second element of the lexical form (the ending of Genitive Singular) contains only the ending -is. These nouns have the same Nominative and Genitive stem. They have equal number of syllables in Nominative Singular and Genitive Singular. So they are known as equal nouns.

cutis, is f (cu-tis – cu-tis); canalis, is m (ca-na-lis – ca-na-lis)

2) The second element of the lexical form contains extra letters of the Genitive form and the ending -is. These nouns have one more syllable in Genitive Singular than in Nominative Singular and are known as unequal nouns.

radix, īcis f (ra-dix – ra-dī-cis); forāmen, īnis n (fo-rā-men – fo-ra-mī-nis)

3) The second element of the lexical form of monosyllabic nouns (nouns having one syllable) is presented by the full form of Genitive Singular. These nouns refer to unequal nouns as well.

os, ossis n; pars, partis f

3. Third declension nouns having extra letters or the full form of Genitive Singular in their lexical form are marked by the changing of the Genitive stem which doesn't coincide with the Nominative stem. The Genitive stem is called the *practical stem*. It is used for making other case forms (for example plural forms).

margo, īnis m: margo – marginis

Nom. stem Gen. stem

	<i>pulmo, ūnis m</i>	<i>radix, ūcis f</i>	<i>forāmen, ūnis n</i>
<i>Nom. Sing.</i>	pulmo	radix	foramen
<i>Gen. Sing.</i>	pulmōn-is	radīc-is	foramīn-is
<i>Nom. Plur.</i>	pulmōn-es	radīc-es	foramīn-a
<i>Gen. Plur.</i>	pulmōn-um	radīc-um	foramīn-um

4. The third-declension nouns are divided into three types according to their practical stem: *consonant, vowel and mixed*. Each noun belongs to some type and is declined according to the corresponding pattern.

1. the **consonant type** includes unequal nouns of the masculine, feminine and neuter gender and their practical stem ends in one consonant:

corpus, corpōr-is n *body*; forāmen, foramīn-is n *opening*; crus, crur-is n *leg*; homo, homīn-is m *man*; pes, ped-is m *foot*; regio, regiōn-is f *region*.

2. the **vowel type** includes nouns mainly of the neuter gender having endings **-e, -al, -ar** in Nominative Singular:

rete, is n *net*; animal, ālis n *animal*; calcar, āris n *calcar, spur*.

3. the **mixed type** includes a) equal nouns having endings **-is, -es** in Nominative Singular: auris, is f *ear*; tabes, is f *tabes*; b) unequal nouns with the practical stem ending in two or more consonants: dens, dent-is m *tooth*; pars, part-is f *part*; cor, cord-is n *heart*.

How to determine the type of the third-declension nouns

1. First see the Nominative form.

— If it ends in **-e; -al; -ar**, the noun is of the vowel type (rete, is n).

— If it ends in **-is / -es** and the number of syllables in Nom. Sing. and Gen. Sing. is equal, the noun is of the mixed type (cutis, is f).

	<i>consonant type</i>	<i>vowel type</i>	<i>mixed type</i>
<i>gender</i>	m, f, n	n	m, f, n
<i>ending of Nom. Sing.</i>		-e, -al, -ar	-es, -is (for nouns with equal number of syllables in Nom. Sing. and Gen. Sing.)
<i>examples</i>		rete, is n calcar, is n animal, is n	canālis, canālis m compāges, is f

2. If the noun doesn't fit any of these types, make Genitive form and find the Genitive stem (practical stem).

— If the stem ends in one consonant, the noun is of the consonant type (corpus - corpōris n).

— If the stem ends in two consonants, the noun is of the mixed type (os, ossis n).

	<i>consonant type</i>	<i>vowel type</i>	<i>mixed type</i>

<i>gender</i>	m, f, n	n	m, f, n
<i>stem of Gen. Sing.</i>	ends in one consonant		ends in two consonants
<i>examples</i>	pulmo, pulmōn-is m radix, radīc-is f pectus, pectōr-is n		dens, dent-is m os, oss-is n pars, part-is f

According to three types of declension there are three patterns of declining

Consonant type

<i>Nom. Sing.</i>	different	<i>regio, ūnis f</i>	<i>forāmen, ūnis n</i>
<i>Gen. Sing.</i>	-is	<i>regiōn-is</i>	<i>foramēn-is</i>
<i>Nom. Plur.</i>	-es ^{m f}	<i>regiōn-es</i>	<i>foramēn-a</i>
<i>Gen. Plur.</i>	-um	<i>regiōn-um</i>	<i>foramēn-um</i>

Vowel Type

<i>Nom. Sing.</i>	-e; -al; -ar	<i>rete, is n</i>
<i>Gen. Sing.</i>	-is	<i>ret-e</i>
<i>Nom. Plur.</i>	-ia	<i>ret-is</i>
<i>Gen. Plur.</i>	-ium	<i>ret-ia</i>
		<i>ret-iūm</i>

Mixed Type

<i>Nom. Sing.</i>	different	<i>pars, partis f</i>	<i>os, ossis n</i>
<i>Gen. Sing.</i>	-is	<i>pars</i>	<i>os</i>
<i>Nom. Plur.</i>	-es ^{m f}	<i>part-is</i>	<i>oss-is</i>
<i>Gen. Plur.</i>	-a ⁿ	<i>part-es</i>	<i>oss-a</i>
	-ium	<i>part-iūm</i>	<i>oss-iūm</i>

Nota Bene! In the plural the noun *vas, vasis n* (*vessel*) is declined according to the second declension:

<i>Nom. Sing.</i>	<i>vas, vasis n</i>	<i>Nom. Plur.</i>	<i>vas-a</i>
<i>Gen. Sing.</i>	<i>vas</i>	<i>Gen. Plur.</i>	<i>vas-ōrum</i>

Lexical minimum № 6

1. abdōmen, inis n *abdomen*
2. accessorius, a, um *accessory*
3. apex, ūcis m *apex, top*
4. articulatio, ūnis f *joint*
5. auris, is f *ear*
6. basis, is f *base*
7. canalis, is m *canal*

8. coccyx, ýgis m	<i>coccygeal bone</i>
9. dens, dentis m	<i>tooth</i>
10. hallux, ūcis m	<i>great toe</i>
11. index, īcis m	<i>index, forefinger</i>
12. lymphaticus, a, um	<i>lymphatic</i>
13. margo, īnis m	<i>margin, border</i>
14. nutricius, a, um	<i>nutritious</i>
15. os, oris n	<i>mouth</i>
16. pars, partis f	<i>part</i>
17. pes, pedis m	<i>foot</i>
18. phalanx, ngis f	<i>phalanx</i>
19. planus, a, um	<i>plain</i>
20. pollex, īcis m	<i>thumb</i>
21. pulmo, ūnis m	<i>lung</i>
22. pyrāmis, īdis f	<i>pyramid</i>
23. regio, ūnis f	<i>region</i>
24. tendo, īnis m	<i>tendon</i>
25. tuber, ēris n	<i>tuber</i>
26. tuberositas, ātis f	<i>tuberosity</i>
27. vagīna, ae f	<i>vagina</i>
28. vas, vasis n	<i>vessel</i>

EXERCISES

1. Write the full form of Genitive Singular; determine the practical stem and type of declension of the following nouns:

a) abdōmen, īnis n; atlas, ntis m; auris, is f; caput, ītis n; cervix, īcis f; rete, is n; cartilāgo, īnis f; dens, dentis m; crus, cruris n; canālis, is m; extremitas, ātis f; gaster, tris f; hallux, ūcis m; iris, irīdis f; calcar, āris n;

b) diaphragma, ātis n; cutis, is f; forāmen, īnis n; fornix, īcis m; os, ossis n; hepar, ātis n; humor, ūris m; index, īcis m; lens, lentis f; larynx, ngis m; occīput, ītis n; pelvis, is f; pancreas, ātis n; pes, pedis m; pars, partis f.

2. Determine the type of declension of the following nouns and decline them:

a) caput, ītis n; dens, dentis m; rete, is n; pulmo, ūnis m; canālis, is m; os, ossis n;

b) articulatio, ūnis f; pars, partis f; tuber, ēris n; os, ossis n; forāmen, īnis n; tendo, īnis m; vas, vasis n.

3. Agree the adjectives with the nouns. Determine the declension of each word in the term. Translate the terms into English:

os, ossis n (zygomatīcus, a, um); auris, is f (medius a, um); pars, partis f (petrōsus, a, um); forāmen, īnis n (posterior, ius); margo, īnis m (laterālis, e); caput, ītis n (longus, a, um); tuber, ēris n (frontālis, e).

4. Agree the adjectives with the nouns, determine the declension of each word and decline the word combinations:

a) articulatio, īnis f (planus, a, um); margo, īnis m (mastoideus, a, um); forāmen, īnis n (nutricius, a, um); regio, īnis f (zygomatīcus, a, um); pulmo, īnis m (dexter, tra, trum);

b) os, ossis n (planus, a, um); auris, is f (medius, a, um); canalis, is m (optīcus, a, um); vas, vasis n (lymphatīcus, a, um); pars, partis f (petrōsus, a, um); dens, dentis m (incisīvus, a, um).

5. Translate the following terms into English:

apex partis petrōsae; articulatiōnes cranii; caput phalangis; foramīna nutricia; ligamentum transversum atlantis; nervi vasōrum; os coccygis; vasa lymphatīca; vasa nervōrum; tuber ischiadīcum; phalanges digitōrum; regiōnes et partes corpōris; vasa vasōrum; phalanx distālis (proximālis) indīcis; processus styloideus ulnae; corpus phalangis; caput phalangis; basis cranii extērna; os zygomatīcum; angūlus oris; apex pulmōnis; articulatio capītis costae; muscūlus longus capītis.

6. Translate the terms into Latin giving lexical forms of all the words:

a) regions of the body; tuber of the upper jaw; nerve of the pterygoid canal; joint of the head of the rib; sutures of the bones; body of the tongue; vessels of the internal ear; tuberosity of the distal phalanx; flat bone.

b) base of the lung; left lung; regions of the abdomen; vessels of vessels; bones of the skull; apex of the head of the fibula; bones of the skull; phalanges of the fingers of the foot; ligament of the top of the tooth; straight muscle of the head; fibrous vagina of tendons.

LESSON 9

§ 18. Nominative Singular endings of third declension nouns

Third declension nouns of the masculine gender

<i>Nom. Sing.</i>	<i>Gen. Sing.</i>	<i>Examples</i>	<i>Exceptions</i>
-os	-ōris	flos, flōris m <i>flower</i>	os, ossis n <i>bone</i> os, oris n <i>mouth</i>
-or	-ōris	tumor, tumōris m <i>tumor</i>	cor, cordis n <i>heart</i> arbor, īris f <i>tree</i>

-o	-ōnis	pulmo, ūnis m <i>lung</i>	nouns ending in -go, -do, -io are of the feminine gender
	-īnis	homo, īnis m <i>man</i>	
-er	-ēris	ureter, ēris m <i>ureter</i>	gaster, tris f <i>stomach</i> mater, tris f <i>membrane of the brain or spinal cord</i> tuber, ēris n <i>tuber</i>
	-ris	venter, ventris m <i>belly</i>	
-ex	-īcis	apex, apīcis m <i>apex, top</i>	—
-es	-ēdis	pes, pedis m <i>foot</i>	equal nouns ending in -es are of the feminine gender
	-ētis	paries, ētis m <i>wall</i>	

The following nouns are also of the masculine gender: canālis, is m *canal*; dens, dentis m *tooth*; fornix, īcis m *vault*; hallux, ūcis m *great toe*; larynx, ngis m *larynx*; margo, īnis m *border*; tendo, īnis m *tendon*; pharynx, ngis m *pharynx*; unguis, is m *nail*.

Third declension nouns of the feminine gender

Nom. Sing.	Gen. Sing.	Examples	Exceptions
-as	-ātis	cavītas, ātis f <i>cavity</i>	vas, vasis n <i>vessel</i> pancreas, ātis n <i>pancreas</i>
-us	-ūtis	salus, ūtis f <i>health</i>	—
	-ūdis	incus, ūdis f <i>incus, anvil</i>	
-es (equal)	-is	tabes, is <i>tabes (tuberculosis)</i>	
-is (equal)	-is	auris, is f <i>ear</i>	axis, is m <i>axis, 2nd cervical vertebra</i> canālis, is m <i>canal</i> unguis, is m <i>nail</i>
-is (unequal)	-īdis	iris, īdis f <i>iris of the eye</i>	
-ns	-ntis	lens, lentis f <i>crystalline lens</i>	dens, dentis m <i>tooth</i>
-rs	-rtis	pars, partis f <i>part</i>	—
-ax	-ācis	pax, pacis f <i>peace</i>	thorax, ācis m <i>chest</i>
-ux	-ūcis	nux, nucis f <i>nut</i>	hallux, ūcis m <i>great toe</i>
-ix	-īcis	radix, īcis f <i>root</i>	fornix, īcis m <i>vault, fornix</i>
-nx	-ngis	phalanx, ngis f <i>phalanx</i>	larynx, ngis m <i>larynx</i> pharynx, ngis m <i>pharynx</i>
-lx	-lcis	calx, calcis f <i>heel</i>	—
-do	-dīnis	hirūdo, īnis f <i>leech</i>	tendo, īnis m <i>tendon</i>
-go	-gīnis	cartilāgo, īnis f <i>cartilage</i>	margo, īnis m <i>border</i>
-io	-iōnis	articulatio, ūnis f <i>joint</i>	—

The following nouns are also of the feminine gender: arbor, ūris f *tree*; gaster, tris f *stomach*; mater, tris f *membrane of the brain or spinal cord*.

Third declension nouns of the neuter gender

Nom. Sing.	Gen. Sing.	Examples	Exceptions
-en	-īnis	tegmen, īnis n <i>roof</i>	ren, renis m <i>kidney</i> lien, ēnis m (or Greek splen, splēnis m) <i>spleen</i> lichen, ēnis m <i>lichen, herpes</i>
-us	-ōris	corpus, ūris n <i>body</i>	—
	-ēris	glomus, ēris n <i>glome</i>	
	-ūris	crus, cruris n <i>leg</i>	
-ur	-ōris	femur, ūris n <i>femur, thigh bone</i>	—
	-ūris	guttur, ūris n <i>throat</i>	
-ut	-ītis	caput, ītis n <i>head</i>	—
-ma	-ātis	chiasma, ātis n <i>chiasm</i>	—
-e	-is	rete, is n <i>net, network</i>	—
-ar	-āris	calcar, āris n <i>calcar, spur</i>	hepar, ātis n <i>liver</i> (r→t)
-(a)l	-(a)lis	animal, alis n <i>animal</i>	—
		fel, felis n <i>bile</i>	—

The following nouns are also of the neuter gender: cor, cordis n *heart*; os, oris n *mouth*; os, ossis n *bone*; pancreas, ātis n *pancreas*; tuber, ēris n *tuber*; vas, vasis n *vessel*.

Lexical minimum № 7

- | | |
|-----------------------|--|
| 1. cartilāgo, īnis f | <i>cartilage</i> |
| 2. cervix, īcis f | <i>neck</i> |
| 3. cor, cordis n | <i>heart</i> |
| 4. crus, cruris n | <i>leg, shin</i> |
| 5. cutis, is f | <i>skin</i> |
| 6. dura mater | <i>hard brain membrane</i> |
| 7. femur, ūris n | <i>thigh bone, hip</i> |
| 8. frons, frontis f | <i>forehead</i> |
| 9. gaster, tris f | <i>stomach</i> |
| 10. gastrīcus, a, um | <i>gastric, related to the stomach</i> |
| 11. hepar, ātis n | <i>liver</i> |
| 12. hepaticus, a, um | <i>hepatic, related to the liver</i> |
| 13. impressio, ūnis f | <i>impression</i> |
| 14. larynx, ngis m | <i>larynx</i> |

15. laryngēus, a, um	<i>laryngeal, related to the larynx</i>
16. lien, liēnis m	<i>spleen</i>
17. mater, tris f	<i>membrane of the brain or spinal cord</i>
18. occīput, ītis n	<i>occiput, back of the head</i>
19. pancreas, ātis n	<i>pancreas</i>
20. paries, ētis m	<i>wall</i>
21. pharynx, ngis m	<i>pharynx</i>
22. pharyngēus, a, um	<i>pharyngeal, related to the pharynx</i>
23. pia mater	<i>soft brain membrane</i>
24. ren, renis m	<i>kidney</i>
25. renālis, e	<i>renal, related to the kidney</i>
26. rete, is n	<i>network</i>
27. sanguis, īnis m	<i>blood</i>
28. sanguineus, a, um	<i>bloody, sanguineous</i>
29. splen, splenis m	<i>spleen (Greek)</i>
30. vomer, ēris m	<i>vomer</i>

EXERCISES

1. Agree the following adjectives with the nouns and translate the terms into English:

pulmo (dexter, tra, trum); canālis (optīcus, a, um); tuber (ischiadīcus, a, um); crus (longus, a, um); forāmen (occipitalis, e); impressio (hepatīcus, a, um); rete (sanguineus, a, um); os (ethmoidālis, e); caput (mediālis, e); vas (venōsus, a, um); pancreas (accessorius, a, um); paries (externus, a, um); pars (petrōsus, a, um); mater (durus, a, um).

2. Translate the terms and decline them:

right leg; lymphatic vessel; external wall; squamous part; left ventricle; deep artery.

3. Translate the following terms into English:

crus longum; tuberositas pterygoidea; impressio hepatica pulmōnis; collum ossis femōris; canālis cervīcis utéri; arteria femōris profunda; cervix dentis; incisūra apīcis cordis; crura ossea; vasa vasōrum; nervi vasōrum; margo linguae; pars laryngēa pharyngis.

4. Translate the following terms into Latin:

cartilage of the ear; bloody network; zygomatic regions; deep lymphatic vessels; crests of the skin; cavity of a tooth; fossa of the head of the thigh bone; neck of the tooth; top of the heart; head of the pancreas; wing of the vomer; car-

tilage of the dividing wall of the nose; impression of the left lung; tuberosity of the shin-bone; deep artery of the thigh bone; ligaments of the liver; bony legs.

LESSON 10

§ 19. Third declension adjectives

Third declension adjectives are divided into three groups according to their endings in Nominative Singular (the primary form):

(1) Adjectives of **three endings** have individual endings for each gender: **m -er; f -is; n -e** (*celer, ēris, ēre, swift*). There are no such adjectives in anatomical terminology.

(2) Adjectives of **two endings** (the most numerous group) have the same ending **-is** for **masculine** and **feminine** genders and the ending **-e** for **neuter** gender (*frontālis, e, frontāl*).

(3) Adjectives of one ending have **common form for all three genders**. Their lexical form represents the ending of Nominative Singular and the ending of Genitive Singular (in the same way as nouns but without the gender): *teres, ētis: teres (Nom. Sing. m; f; n) — terētis (Gen. Sing.)*

	m	f	n	lexical form	
Adjectives of two endings	-is		-e	brevis, e <i>short</i> costālis, e <i>costal</i>	
Adjectives of one ending	-x, -s			Nom. Sing.	Gen. Sing.
				simplex, teres, biceps	īcis <i>simple</i> ētis <i>round</i> cipītis <i>two-headed</i>

Third declension adjectives of two endings

	<i>m f</i>	<i>n</i>	<i>frontalis, e</i>
<i>Nom. Sing.</i>	-is	-e	<i>costāl-is</i>
<i>Gen. Sing.</i>		-is	<i>costāl-is</i>
<i>Nom. Plur.</i>	-es	-ia	<i>costāl-es</i>
<i>Gen. Plur.</i>		-ium	<i>costāl-iūm</i>

Third-declension adjectives of one ending

	<i>m f</i>	<i>n</i>	<i>teres, ētis</i>
<i>Nom. Sing.</i>		-s; -x	<i>teres</i>
<i>Gen. Sing.</i>		-is	<i>terēt-is</i>
<i>Nom. Plur.</i>	-es	-ia	<i>terēt-es</i>
<i>Gen. Plur.</i>		-ium	<i>terēt-iūm</i>

Lexical minimum № 8

1. abdominālis, e	<i>abdominal</i>
2. apicālis, e	<i>apical, related to the top</i>
3. auriculāris, e	<i>auricular, related to the ear</i>
4. biceps, cip̄tis	<i>two-headed</i>
5. brevis, e	<i>short</i>
6. cerebrālis, e	<i>crebral, realted to the brain</i>
7. cervicālis, e	<i>cervical, related to the neck</i>
8. commūnis, e	<i>common</i>
9. craniālis, e	<i>cranial, related to the skull</i>
10. faciālis, e	<i>facial</i>
11. linguālis, e	<i>lingual, related to the tongue</i>
12. lumbālis, e	<i>lumbar, related to the loin</i>
13. mentālis, e	<i>mental, related to the chin</i>
14. musculāris, e	<i>muscular</i>
15. nasālis, e	<i>nasal, related to the nose</i>
16. pulmonālis, e	<i>pulmonary, related to the lung</i>
17. quadričeps, cip̄tis	<i>four-headed</i>
18. radiālis, e	<i>radial, related to the forearm bone</i>
19. simplex, īcis	<i>simple</i>
20. superficiālis, e	<i>superficial</i>
21. teres, ētis	<i>round</i>
22. triceps, cip̄tis	<i>three-headed</i>

EXERCISES

1. Make adjectives of two endings from the following nouns (using suffixes *-āl*, *-ār*-). Translate them into English:

dens, dentis m (*tooth*); frons, frontis f (*forehead*); latus, ēris n (*side*); dorsum, i n (*back*); muscūlus, i m (*muscle*), orbīta, ae f (*eye-socket*); clavicūla, ae f (*clavicle*); costa, ae f (*rib*); vertēbra, ae f (*vertebra*); fibūla, ae f (*splint-bone*); facies, ēi f (*face*); occīput, ītis n (*occiput, back of the head*); ulna, ae f (*elbow bone*); mandibūla, ae f (*lower jaw*); maxilla, ae f (*upper jaw*); cranium, i n (*skull*).

2. Agree adjectives with the nouns. Determine the declension of each word in the word combination. Make the word combinations Nom. Plur.:

a) fovea, ae f (costālis, e); ramus, i m (mediālis, e); arteria, ae f (commūnis, e); tubercūlum, i n (mediālis, e); forāmen, īnis n (ethmoidālis, e); articulatio, ūnis f (simplex, īcis);

b) margo, īnis m (frontālis, e); os, ossis n (temporālis, e); nervus, i m (faciālis, e); incisūra, ae f (radiālis, e); caput, ītis n (laterālis, e); ligamentum, i n (teres, ētis); muscūlus, i m (biceps, cip̄tis).

3. Decline the following word combinations:

forāmen teres; muscūlus biceps; vertēbra cervicālis; vas capillāre.

4. Agree the adjective with each noun. Translate the word combinations into Latin:

vertebral (canal; notch; opening); frontal (suture; tuber); two-headed (muscle; tuber); lumbar (fascia; region; vertebra); occipital (opening; artery; nerve).

5. Translate the terms into English:

a) forāmen ovāle; incisūra claviculāris sterni; ossa cranii cerebrālis; tuber frontāle; os parietāle; bursa muscūli terētis; ligamentum teres acetabūli; articulatio simplex; muscūlus biceps femōris;

b) muscūlus semispinālis thorācis; sutūra intermaxillāris; crista infratemporālis; os hyoideum; fossa subscapulāris; fovea sublinguālis; angūlus ocūli laterālis; caput longum muscūli bicipītis brachii; muscūli faciāles; canales laterāles; venae pulmonāles dextrae; spina nasālis ossis frontālis; vagina musculōrum communis.

6. Translate into Latin:

a) frontal region; large occipital opening; part of the occipital bone; round ligament of the uterus; four-headed muscle of the thigh bone; simple joint; simple bony legs; subtemporal crest.

b) vessels of the internal ear; lateral sacral arteries; superficial lymphatic vessels; clavicular notch; openings of the pulmonary veins; lateral parts of the occipital bone; tendon of the four-headed muscle of the thigh; three-headed muscle of the shoulder; cranial nerves; sieve-shaped openings; round ligament of the uterus.

LESSON 11

§ 20. Fourth-declension nouns

Fourth-declension nouns are the nouns of the masculine and neuter genders which have endings **-us** for **masculine** and **-u** for **neuter** gender in Nominative Singular. In **Genitive Singular** they all have ending **-us** that is the indicator of the fourth declension.

arcus, us m (*arch*); ductus, us m (*duct*)
cornu, us n (*horn*); genu, us n (*knee*)

Remember!!! Some nouns of the **feminine** gender ending in **-us** refer to the fourth declension; but only **manus**, us **f** (*hand*) is used in the anatomical terminology.

<i>Gender</i>	<i>Nominative Singular</i>	<i>Genitive Singular</i>	<i>Example</i>
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m	- us			sinus, us m (<i>sinus</i>)
f		- us		manus, us f (<i>hand</i>)
n	- u			cornu, us n (<i>horn</i>)

Nouns of the fourth declension are declined as follows:

	<i>m f</i>	<i>n</i>	<i>m</i>	<i>f</i>	<i>n</i>
<i>Nom. Sing.</i>	- us	- u	<i>sin-us</i>	<i>man-us</i>	<i>corn-u</i>
<i>Gen. Sing.</i>		- us	<i>sin-us</i>	<i>man-us</i>	<i>corn-us</i>
<i>Nom. Plur.</i>	- us	- ua	<i>sin-us</i>	<i>man-us</i>	<i>corn-ua</i>
<i>Gen. Plur.</i>		- uum	<i>sin-uum</i>	<i>man-uum</i>	<i>corn-uum</i>

§ 21. Fifth-declension nouns

Fifth-declension nouns are mostly nouns of the **feminine** gender. They have the ending **-es** in Nominative Singular and the ending **-ēi** in **Genitive Singular**.

facies, ēi f (*face, surface*); superficies, ēi f (*surface*)

<i>Gender</i>	<i>Nominative Singular</i>	<i>Genitive Singular</i>	<i>Example</i>
f	- es	- ēi	facies, ēi f (<i>face</i>)

Nouns of the fifth declension are declined as follows:

	<i>f</i>	
<i>Nom. Sing.</i>	- es	<i>faci-es</i>
<i>Gen. Sing.</i>	- ēi	<i>faci-ēi</i>
<i>Nom. Plur.</i>	- es	<i>faci-es</i>
<i>Gen. Plur.</i>	- ērum	<i>faci-ērum</i>

§ 22. Anatomical abbreviations

Sing.	Plur.
a. — arteria <i>artery</i>	aa. — arteriae <i>arteries</i>
b. — bursa <i>bag</i>	bb. — bursae <i>bags</i>
gl. — glandūla <i>gland</i>	gll. — glandūlae <i>glands</i>
for. — forāmen <i>opening</i>	forr. — foramina <i>openings</i>
lig. — ligamentum <i>ligament</i>	ligg. — ligamenta <i>ligaments</i>
m. — muscūlus <i>muscle</i>	mm. — muscūli <i>muscles</i>
n. — nervus <i>nerve</i>	nn. — nervi <i>nerves</i>
r. — ramus <i>branch</i>	rr. — rami <i>branches</i>
sul. — sulcus <i>groove</i>	sull. — sulci <i>grooves</i>
v. — vena <i>vein</i>	vv. — venae <i>veins</i>
vag. — vagīna <i>vagina, sheath</i>	vagg. — vagīnae <i>vaginae, sheaths</i>

Lexical minimum № 9

1. bilis, is f	<i>bile</i>
2. cardiācus, a, um	<i>hearty</i>
3. carpus, i m	<i>wrist</i>
4. cornu, us n	<i>horn</i>
5. ductus, us m	<i>duct</i>
6. flavus, a, um	<i>yellow</i>
7. genu, us n	<i>knee</i>
8. hiatus, us m	<i>crack, split, hiatus</i>
9. intercostālis, e	<i>intercostal</i>
10. manus, us f	<i>hand</i>
11. meātus, us m	<i>passage</i>
12. medulla, ae f	<i>medullary substance, marrow</i>
13. medulla ossium	<i>bone marrow</i>
14. medulla spinālis	<i>spinal marrow (cord)</i>
15. obliquus, a, um	<i>oblique</i>
16. plexus, us m	<i>network, plexus</i>
17. recessus, us m	<i>recess</i>
18. ruber, bra, brum	<i>red</i>
19. sinus, us m	<i>sinus</i>
20. sublinguālis, e	<i>sublingual</i>
21. tractus, us m	<i>tract</i>

EXERCISES

1. Agree each adjective with the noun. Determine the declension of each word in the word combination. Translate the word combinations into English:

cornu, us n (coccygēus, a, um; anterior, ius; laterālis, e); ductus, us m (sinister, tra, trum; nasolacrimālis, e; posterior, ius); processus, us m (palatīnus, a, um; maxillāris, e; posterior, ius); facies, ēi f (temporālis, e; inferior, ius; internus, a, um).

2. Agree the adjective with each noun and decline the word combinations:

common (leg, plexus, duct); palatine (groove, opening, process).

3. Make the following word combinations Nom. Plur.:

plexus venōsus; plexus commūnis; processus palatīnus; processus mastoi-deus; sinus sphenoidālis; sinus frontālis; sinus petrōsus; cornu occipitāle; cornu dextrum; ductus sublinguālis.

4. Translate into English:

a) ductus sublinguāles; lamīna laterālis processus pterygoidei; muscūli faciāles; plexus faciālis; plexus cardiāci; arcus ductus thoracīci; processus styloideus radii; cornu medullae spinālis;

b) caput superficiāle; medulla ossium rubra; medulla ossium flava; medulla renālis; apertūra sinus sphenoidālis; ossa digitōrum manus; ligamenta flava; regiōnes faciēi; ductus hepaticus commūnis; processus styloideus ulnae; arteria mediālis genus; sinus maxillāris; tractus optīci; rami tractus optīci; articulatiōnes interphalangeae manus; arcus palatopharyngēus; cornu sacrāle.

5. Translate into Latin:

a) groove of the wedge-shaped sinus; sublingual ducts; lateral surface; frontal sinus; bulb of the occipital horn; medial plate of the pterigoid process; superficial temporal artery; right hepatic duct; medial upper artery of the knee; wedge-shaped sinus; dorsal surface of the hand.

b) facial nerve; lateral column of the spinal cord; short ligaments of the fingers of the hand; medial and lateral plates of the pterigoid processes; medial surface; common carotic plexus; process of the nasal concha; dividing wall of the frontal sinuses; sinuses of the hard brain membrane; lateral artery of the knee; articular muscle of the knee; middle nasal passage.

6. Write the following terms without abbreviations; translate them into English:

gl. thyroidea; v. iugulāris interna; r. externus n. laryngei superiōris; a. vertebrālis; m. longus capītis; rr. cardiāci inferiōres; vv. cordis anteriōres; rr. musculāres n. ischiadīci; a. et v. thoracīca interna; aa. et vv. intercostāles; forr. palatīna minōra; nn. articulāres.

LESSON 12

§ 23. Comparison of adjectives

There is a number of adjectives used in anatomical terminology and referring neither to the first group adjectives (-us; -a; -um) nor to the second group adjectives (-is; e). They are

a) the forms of comparative degree of adjectives: anterior, ius *front*, *anterior*; superior, ius *upper*; inferior, ius *lower*; interior, ius *inner*; posterior, ius *back*, *posterior*; major, jus *larger*; minor, us *smaller*

b) the forms of superlative degree of adjectives: minīmus, a, um *the smallest*; suprēmus, a, um *the highest*.

The lexical form of the comparative degree of adjectives includes the common form for **masculine** and **feminine** genders with the suffix **-ior** and the suffix **-ius** for the **neuter** gender:

Lexical form

m; f

n

anterior, ius (*front*) anter-iōr anter-iōs

Comparative forms are declined according to the consonant type of the third declension nouns:

	<i>m f</i>	<i>n</i>	<i>anterior (m; f)</i>	<i>anterius (n)</i>
<i>Nom. Sing.</i>	-iōr	-iōs	<i>anter-iōr</i>	<i>anter-iōs</i>
<i>Gen. Sing.</i>		-iōris	<i>anter-iōris</i>	<i>anter-iōris</i>
<i>Nom. Plur.</i>	-iōres	-iōra	<i>anter-iōres</i>	<i>anter-iōra</i>
<i>Gen. Plur.</i>		-iōrum	<i>anter-iōrum</i>	<i>anter-iōrum</i>

Comparative forms agree with the nouns they modify like positive forms in number, gender, and case:

	<i>m</i>	<i>m</i>
<i>back arch</i>	<i>arcus</i>	<i>posterior</i>
	<i>f</i>	<i>f</i>
<i>back spine</i>	<i>spina</i>	<i>posterior</i>
	<i>n</i>	<i>n</i>
<i>back tubercle</i>	<i>tuberculum</i>	<i>posterior</i>

The superlative form of adjectives is formed by the suffix **-issim-** and the endings **-us, -a, um**. These adjectives have the same lexical form and the same pattern of declension as the first group adjectives: long-issim-us, a, um *the longest*; lat-issim-us, a, um *the widest*.

In anatomical terminology the form **magnus, a, um** is usually used for single structures having no pair and is translated as «**large, great**»: forāmen occipitāle *large occipital opening*.

The form **major, jus** is usually used for paired structures to compare their size and may be translated as «**larger, greater**»: ala major et ala minor *larger and smaller wing*; muscūlus pectorālis major – muscūlus pectorālis minor *larger and smaller pectoral muscle*. The deviation from this rule is noted in the terms: vena saphēna magna *large subcutaneous vein* and vena saphēna parva *small subcutaneous vein*, as they belong to different regions of the lower extremity.

§ 24. Names of muscles

Names of muscles are presented by two words: the noun **muscūlus, i m** and the name of the muscle by its function having the ending **-or / -er**: **muscūlus abductor, ūris m (abductor muscle)**. Mind that the first word (**muscūlus, i m**) is the second-declension noun and the second word (**abductor, ūris m**) is the third-declension noun. After the name of the muscle there goes the noun in Genitive Singular or Plural.

muscūlus levātor scapūlae – elevator muscle of the shoulder blade
muscūlus flexor digitōrum manus – flexor muscle of the fingers of the hand

Lexical minimum № 10

1. caecum, i n	<i>blind intestine</i>
2. colon, i n	<i>colon</i>
3. duodēnum, i n	<i>duodenum</i>
4. ileum, i n	<i>ileum</i>
5. intestinālis, e	<i>intestinal</i>
6. intestīnum, i n	<i>intestine</i>
7. intestīnum crassum	<i>large intestine</i>
8. intestīnum (i) tenuē (is)	<i>small intestine</i>
9. jejunūm, i n	<i>jejunum</i>
10. latissīmus, a, um	<i>the widest</i>
11. longissīmus, a, um	<i>the longest</i>
12. magnus, a, um	<i>large, great</i>
13. maximus, a, um	<i>the largest</i>
14. minimus, a, um	<i>the smallest</i>
15. m. abductor, ōris m	<i>abductor muscle</i>
16. m. adductor, ōris m	<i>adductor muscle</i>
17. m. buccinātor, ōris m	<i>cheek muscle,</i> <i>constrictor</i>
18. m. constrictor, ōris m	<i>constrictor</i>
19. m. corrugātor, ōris m	<i>corrugator muscle</i>
20. m. depressor, ōris m	<i>depressor muscle</i>
21. m. dilatātor, ōris m	<i>dilator muscle</i>
22. m. extensor, ōris m	<i>extensor (muscle)</i>
23. m. flexor, ōris m	<i>flexor (muscle)</i>
24. m. levātor, ōris m	<i>levator, elevator</i>
25. m. massēter, ēris m	<i>chewer muscle</i>
26. m. rotātor, ōris m	<i>rotator muscle</i>
27. m. sphincter, ēris m	<i>sphincter (muscle)</i>
28. m. tensor, ōris m	<i>tensor muscle</i>
29. rectum, i n	<i>rectum</i>
30. suprēmus, a, um	<i>the highest</i>

EXERCISES

1. Finish up the lexical form of the following adjectives:

anterior, posterior, transversus, superior, inferior, frontalis, major, minor, biceps.

2. Decline the following adjectives:

anterior, ius; inferior, ius; interior, ius; major, jus; minor, minus; posterior, ius; superior, ius.

3. Decline the following word combinations:

facies articulāris superior; forāmen posterius; muscūlus latissīmus.

4. Agree the adjectives with each noun and translate the word combinations:

front (muscle, surface, ligament, opening, lobe, tubercle, depression, crest); lower (muscle, vein, concha, lip, process, arch, spine); larger [major, jus] (horn, wing, canal, groove, head); smaller [minor, us] (horn, muscle, opening, notch, wing, tubercle, depression); back (arch, surface, ligament, tubercle, opening, spine).

5. Translate the terms into English:

a) arcus dentālis inferior (superior); arteria intercostālis suprēma; arteriae palatīnae minōres; cornu medullae spinālis posterius; crista nasālis anterior; facies articulāris superior; forāmen sacrāle anterius; foramīna palaīna minōra; tubercūlum posterius atlantis;

b) arteria et vena ethmoidāles posteriōres; cornua coccygēa maiōra et minōra; foramīna venārum minimārum; ligamentum tibioulnāre anterius; muscūli intercostāles intīmi; musculus longissīmus thorācis; muscūlus teres minor; muscūli oblīqui superior et inferior; muscūlus latissīmus dorsi; spina inferior; nodi lymphatīci gastrīci sinistri; ossa membra inferiōris; processus articulāres superiōres; vena ophthalmīca inferior; nervus optīcus.

6. Translate into Latin:

a) lower angle of the shoulder blade; front gastric network; back process of the wedge-shaped bone; upper ligament of the shoulder blade; back plate of the vagina of the straight muscle of the abdomen; back sinuses; front wall of the stomach; lower coronary sinus; front ligament of the atlas; crest of the smaller tubercle; front border of the lung; groove of the larger petrous nerve.

b) larger and smaller straight muscles of the head; inner occipital crest; large occipital opening; opening of the lower hollow vein (vena cava); back tuber of the atlas; temporal surface of the larger wing; oblique ligaments of the fingers of the hand; deep lymphatic node; left gastric lymphatic nodes; optic tract; upper ophthalmic vein.

7. Translate into Latin:

bulb of the duodenum; abductor muscle of the great toe; extensor muscle of the fingers; radial flexor muscle of the wrist; depressor muscle of the dividing wall; horizontal part of the duodenum; long extensor muscle of the thumb; depressor muscle of the lower lip; elevator muscle of the upper lip; superior oblique muscle of the head; transverse folds of the rectum.

LESSON 13

§ 25. Revision

Lexical minimum № 11

1. antebrachium, i n	<i>forearm</i>
2. chiasma, ātis n	<i>chiasm</i>
3. cingūlum, i n	<i>girdle</i>
4. columna, ae f	<i>column</i>
5. coronarius, a, um	<i>coronary</i>
6. fibrōsus, a, um	<i>fibrous</i>
7. flexūra, ae f	<i>flexure, curve, twist</i>
8. ganglion, ii n	<i>ganglion, nerve node</i>
9. glandūla, ae f	<i>gland</i>
10. lacrimālis, e	<i>lacrimal, related to tears</i>
11. longitudinālis, e	<i>longitudinal, lengthwise</i>
12. membrum, i n	<i>extremity, limb</i>
13. nucleus, i m	<i>nucleus, centre</i>
14. oesophāgus, i m	<i>oesophagus, gullet</i>
15. oesophagēus, a, um	<i>esophageal, related to the oesophagus</i>
16. radix, īcis f	<i>root</i>
17. retīna, ae f	<i>retina</i>
18. sympathīcus, a, um	<i>sympathetic</i>
19. thyroideus, a, um	<i>thyroid</i>
20. viscerālis, e	<i>visceral, related to inner organs</i>

1. Translate the words in Nom. Plur. into English:

venae; foramina; muscūli; sinus; arteriae; sulci; crura; rami; canāles; nervi; cartilagīnes; cornua; ligamenta; processus; lobi; ganglia; dentes, septa, vasa, regiōnes.

2. Group the terms into two columns – terms in Nom. Sing. and terms in Nom. Plur. Translate them into English:

pyramīdes renāles; muscūli transversi; sinus frontālis; ductus lymphatīci; ductus sublinguāles; sulcus inferior; sinus ethmoidāles; articulatiōnes costochondrāles (*Greek chondros cartilage*); ductus laterālis; arteria major;

atrium dextrum; articulatiōnes sternocostāles; arteriae inferiōres; sulcus inferior; processus temporāles; tunīca musculāris.

3. Choose the correct ending. Give the lexical form of each word and translate the terms into English:

sutūrae oss (-ium; -um); vagīna tendīn (-ium; -um); septum sinuum frontal(-ium; -um); ligamenta dent(-ium; -um); plexus nervōrum spināl(-ium; -um); chiasma tendīn(-ium; -um); tubercūlum anterius et posterius vertebrārum cervical (-ium; -um); nuclei nervōrum cranial (-ium; -um).

4. Choose the correct ending. Give the lexical form of each word and translate the terms into English:

ligament (-a; -ia; -ua) hepātis; crur (-a; -ia; -ua) osse (-a; -ia; -ua); dur (-a; -ia; -ua) mater; crist (-a; -ia; -ua) anterior; ven (-a; -ia; -ua) cav (-a; -ia; -ua); foramīn (-a; -ia; -ua) palatīn (-a; -ia; -ua) minōr (-a; -ia; -ua); ligament (-a; -ia; -ua) transvers (-a; -ia; -ua); lamīn (-a; -ia; -ua) arcus vertēbrae; oss (-a; -ia; -ua) cranii; valv (-a; -ia; -ua) lymphatic (-a; -ia; -ua); foramīn (-a; -ia; -ua) sacrāl (-a; -ia; -ua) minor (-a; -ia; -ua); foramīn (-a; -ia; -ua) ethmoidal (-a; -ia; -ua); ligament (-a; -ia; -ua) intercarpal (-a; -ia; -ua) interosse (-a; -ia; -ua); cornu (-a; -ia; -ua) majōr (-a; -ia; -ua) et minōr (-a; -ia; -ua); ven (-a; -ia; -ua) accessori (-a; -ia; -ua).

5. Explain the use of the underlined endings, translate the terms into English:

vagīna tendīnum musculōrum extensōrum radiālīum carpi; sulcus temporālis inferior; caput laterāle muscūli tricipītis; muscūlus flexor hallūcis longus; flexūra colī sinistra; muscūlus longus colli; plica longitudinālis duodēni; ligamentum transversum scapūlae superiūs; articulatiōnes cranii; ligamenta interossea; plicae palatīnae transversae; lobus superior pulmōnis sinistri; plicae tunīcae mucōsae; apex partis petrōsae; vasa auris internae; septum sinuum sphenoidalium; ganglia plexūm sympatheticōrum; sulcus sinus sphenoidālis; sulci nervi petrōsi majoris; plicae recti; muscūli dorsi recti; lingūla pulmōnis sinistri.

6. Translate into English:

angūlus ocūli laterālis; bursa muscūli terētis; caput laterāle muscūli tricipītis; caput longum muscūli bicipītis brachii; crista nasālis anterior; forāmen ovāle; foramīna sacralia pelvīna; margo mastoideus ossis occipitālis; muscūli faciāles; muscūli oblīqui superior et inferior; muscūlus biceps femōris; muscūlus teres minor; os parietāle; tuber frontāle; processus lacrimālis conchae nasālis inferiōris; muscūli intercostāles; medulla ossium flava; medulla ossium rubra; medulla renālis; ossa membra inferiōris; cornu superius cartilagīnis thyroideae; arteria hepātica; canālis radīcis dentis; ductus hepaticus commūnis; facies viscerālis; foramīna sacralia pelvīna; ligamenta anteriōra durae matris; ligamentum teres hepātis; margo linguae; ossa membra inferiōris; tunīca mucōsa oris;

vasa sanguinea retīnae; pia mater spinālis; vagīnae fibrōsae tendīnum digitōrum pedis; ligamentum hepatoduodenāle; articulatiōnes sternocostāles; muscūlus bronchooesophagēus; muscūlus rectus abdomīnis; pars abdominālis (thoracīca, cervicālis) oesophāgi; recessus duodenāles superior et inferior; recessus ileocaecālis inferior; tunīca musculāris oesophāgi; muscūli oblīqui superior et inferior; cornu inferius cartilagīnis thyroideae; processus articulāres superiōres; arteria superior mediālis genus; pelvis major et minor; r. externus n. laryngei superiōris; rr. cardiāci inferiōres; vv. cordis anteriōres; forr. palatīna minōra; cornu medullae spinālis posterius; muscūlus latissīmus dorsi; spina inferior.

7. Translate into Latin:

wing of the vomer; straight muscle of the head; smaller sublingual ducts; smaller sacral openings; posterior margin of the petrous part; lower vertebral notches; bloody vessels of the retina; orbital part of the frontal bone; rotator muscles of the eyeball; nuclei of the cranial nerves; openings of the smallest veins; dividing wall of the frontal sinuses; long elevator muscles; red and yellow bone marrow; body of the hyoid bone; accessory ligaments of the ribs; ligaments of the head of the splint-bone; tip of the posterior horn; large horn of the hyoid bone; upper horn of the thyroid cartilage.

LESSON 14

§ 26. Sample final test in anatomical terminology

**1. Combine the nouns with the adjectives and decline the combinations
(Nom. Sing.; Gen. Sing.; Nom. Plur.; Gen. Plur.)**

caput, ītis n (major, jus); os, ossis n (planus, a, um); arteria, ae f (occipitālis, e)

**2. Translate the terms into Latin; 3. Translate the terms into English:
write the lexical forms of all the words:**

- 1) muscular tunica of the stomach
- 2) surface of the tubercle of the rib
- 3) lymphatic nodes of the neck
- 4) palatal process of the upper jaw
- 5) gastric folds
- 6) inferior deep vein
- 7) levator muscle of the nose
- 8) muscles of the rectum

- 1) caput ossis femōris
- 2) cornu uteri dextrum
- 3) facies pulmonālis cordis
- 4) muscūlus longus
- 5) muscūlus flexor digiti
- 6) arteria superior laterālis genus
- 7) basis cordis
- 8) forāmen sacrāle anterius

LATIN-ENGLISH ANATOMICAL GLOSSARY

LATIN	ENGLISH
A	
a (ab) (<i>w. abl.</i>)	from
abdōmen, īnis n	abdomen
abdominālis, e	abdominal
accessorius, a, um	accessory
acetabūlum, i n	cotyloid cavity, acetabulum
acromion, i n	acromion, lateral end of the shoulder blade crest
acustīcus, a, um	acoustic
ad (<i>acc.</i>)	to
affērens, ntis	afferent
ala, ae f	wing
alāris, e	alar
albus, a, um	white
alveōlus, i m	alveolus
angūlus, i m	angle
ante (<i>w. acc.</i>)	before
antebrahium, i n	forearm
anterior, ius	front, anterior
anus, i m	anus
aorta, ae f	aorta
apertūra, ae f	aperture
apex, īcis m	apex, top
apicālis, e	apical, related to the top
appendix, īcis f	appendage
arcus, us m	arch
areōla, ae f	areola
arteria, ae f	artery
arteriālis, e	arterial
arteriōsus, a, um	arterial
articulāris, e	articular
articulatio, ūnis f	joint
ascendens, ntis	ascending
asper, ēra, ērum	rough
atlas, antis m	1 st cervical vertebra, atlas
atrium, i n	atrium (heart chamber)
auricūla, ae f	auricle, auricula
auriculāris, e	auricular
auris, is f	ear
axis, is m	2 nd cervical vertebra, axis

B

basis, is f	base
biceps, cip̄itis	two-headed, bicipital
biliāris, e	biliary
bilis, is f	bile
brachium, i n	shoulder
brevis, e	short
bronchus, i m	bronchus
bulbus, i m	bulb
bulbus oculi	eyeball
bursa, ae f	bursa, bag

C

caecum, n	caecum, blind intestine
calcanēus, a, um	calcaneal
calcar, āris n	calcar, spur
canālis, is m	canal
capillāris, e	capillary
capsula, ae f	capsule
caput, ītis n	head
cardiācus, a, um	cardiac
carotīcus, a, um	carotic
carōtis, īdis	carotid
carpus, i m	wrist
cartilaginēus, a, um	cartilaginous
cartilāgo, īnis f	cartilage
caverna, ae f	cavern
cavernōsus, a, um	cavernous
cavītas, ātis f	cavity
cavum, i n	cavity
cavus, a, um	hollow
cellūla, ae f	cell
cellulāris, e	cellular
cerebellāris, e	cerebellar
cerebellum, i n	cerebellum
cerebrālis, e	cerebral, related to the brain
cerēbrum, i n	cerebrum, brain
cervicālis, e	cervical, related to the neck
cervix, īcis f	neck, cervix
chiasma, ātis n	chiasm
cilium, i n	cilium, eyelash
cingūlum, i n	girdle
circumflexus, a, um	circumflex
clavicūla, ae f	clavicle

clavicularis, e	clavicular
coccygeus, a, um	coccygeal
coccyx, ygis m	coccyx, coccygeal bone
cochlea, ae f	cochlea
cochlearis, e	cochlear
collum, i n	neck
colon, i n	colon
columna, ae f	column
commissura, ae f	joining, commissure
communis, e	common
compactus, a, um	dense
compositus, a, um	compounded
concha, ae f	concha
contra (w. acc.)	against
cor, cordis n	heart
cornu, us n	horn
coronarius, a, um	coronary
corpus, ōris n	body
cortex, īcis m	cortex
corticālis, e	cortical
costa, ae f	rib
costālis, e	costal
craniālis, e	cranial
cranium, i n	skull
cribrōsus, a, um	cribrate, sieve-shaped
crista, ae f	crest
crus, cruris n	leg
cum (w. abl.)	with
curvatūra, ae f	curvature
cutis, is f	skin

D

de (w. abl.)	from, about
deltoideus, a, um	deltoid
dens, dentis m	tooth
dentālis, e	dental, related to the tooth
descendens, ntis	descending
dexter, tra, trum	right
diaphragma, ātis n	diaphragm
digītus, i m	finger
diploē, ēs f	diploe
distālis, e	distal
dorsālis, e	dorsal
dorsum, i n	back

ductus, us m	duct
duodenālis, e	duodenal
duodēnum, i n	duodenum
dura mater	hard brain membrane
durus, a, um	hard

E

e (ex) (<i>w. abl.</i>)	out of, of, from
effērens, ntis	afferent
encephālon, i n	encephalon, brain
esophagēus, a, um	esophageal
esophāgus, i m (oesophāgus)	esophagus
et	and
ethmoidālis, e	ethmoid, sieve-shaped
externus, a um	external
extremītas, ātis f	extremity, limb

F

faciālis, e	facial
facies, ēi f	face, surface
fascia, ae f	fascia
femur, ūris n	femur, thigh bone, thigh
fibra, ae f	fibra, fiber
fibrōsus, a, um	fibrous
fibūla, ae f	fibula, splint-bone
fibulāris, e	fibular, related to the splint-bone
fissūra, ae f	fissure, narrow slit
flavus, a, um	yellow
flexūra, ae f	flexure, curve, twist
forāmen, īnis n	foramen, opening
fornix, īcis m	vault, fornix
fossa, ae f	fossa, shallow depression
fovea, ae f	fovea, small pit
frons, ntis f	forehead
frontālis, e	frontal
fundus, i m	fundus, bottom

G

ganglion, i n	ganglion, nerve node
gaster, tris f	stomach
gastrīcus, a, um	gastric
generālis, e	general
genu, us n	knee
gingīva, ae f	gingiva, gum

glandūla, ae f	gland
glandūla thyr(e)oidea	thyroid gland
globus, i m	globe
glomus, i m	glome
griseus, a, um	gray
gyrus, i m	gyrus, convolution

H

hallux, ūcis m	great toe
hamūlus, i m	hamulus, hook
hepar, ātis n	liver
hepatīcus, a, um	hepatic, related to the liver
hiātus, us m	hiatus, crack, split
homo, īnis m	man
horisontālis, e	horizontal
humērus, i m	humerus, upper arm
humor, ūris m	humor
hyoideus, a, um	hyoid (bone)
hypogastrīcus, a, um	hypogastric
hypoglossus, a, um	hypoglossal (nerve)

I

ileocaecālis, e	ileocecal
ileum, i n	ileum
iliācus, a, um	iliac
impressio, ūnis f	impression
incisīvus, a, um	incisive (tooth)
incisūra, ae f	notch
incus, ūdis f	incus, anvil
index, īcis m	index, forefinger
inferior, ius	lower, inferior
infra	under, beneath
in (w. acc., abl.)	into, in
inter (w. acc.)	between
intercostālis, e	intercostal
interior, ius	inner
internus, a, um	internal
interosseus, a, um	interosseal
intestinālis, e	intestinal
intestīnum, i n	intestine
intestīnum crassum	large intestine
intestīnum (i) tenuē (is)	small intestine
intravenōsus, a, um	intravenous

iris, irīdis f	iris of the eye
ischiadīcus, a, um	ischiatric
ischiorectālis, e	ischiorectal
ischium, i n	ischium

J

jejūnum, i n	jejunum
jugulāris, e	jugular

L

labium, i n	lip
lacrimālis, e	lacrimal, related to tears
lamīna, ae f	plate, lamina
laryngēus, a, um	laryngeal, related to the larynx
larynx, yngis m	larynx
laterālis, e	lateral
latissīmus, a, um	the widest
latus, a, um	broad, wide
latus, ēris n	side, flank
lens, lentis f	crystalline lens
liber, ēra, ērum	free
lien, liēnis m	spleen
ligamentum, i n	ligament
linea, ae f	line
lingua, ae f	tongue
linguālis, e	lingual, related to the tongue
lobus, i m	lobe
longissīmus, a, um	the longest
longus, a, um	long
lumbālis, e	lumbar, related to the loin
lumbus, i m	loin
lymphatīcus, a, um	lymphatic

M

magnus, a, um	large, great
major, jus	larger, greater
mandibūla, ae f	lower jaw, mandible
mandibulāris, e	mandibular, related to the lower jaw
manubrium, i n	manubrium
manus, us f	hand
margo, īnis m	margin, border
mastoideus, a, um	mastoidal, mammiform

mater, tris f	membrane of the brain or spinal cord
maxilla, ae f	upper jaw, maxilla
maxillāris, e	maxillary, related to the upper jaw
maxīmus, a, um	the largest, the greatest
meātus, us m	passage
mediālis, e	medial
mediānus, a, um	middle, median
medius, a, um	middle
medulla, ae f	marrow, medullary substance
medulla ossium	bone marrow
medulla spinālis	spinal cord, spinal marrow
membrāna, ae f	membrane, covering
membrum, i n	extremity, limb
meninx, ngis f	meninx
mentālis, e	mental, related to the chin
mentum, i n	chin
metacarpus, i m	metacarpus
metatarsus, i m	metatarsus
minīmus, a, um	the smallest
minor, minus	smaller
mucōsa, ae f	mucous membrane
mucōsus, a, um	mucous
musculāris, e	muscular
muscūlus, i m	muscle
m. abductor, ōris m	abductor muscle
m. adductor, ōris m	adductor muscle
m. buccinātor, ōris m	cheek muscle, buccinator
m. constrictor, ōris m	constrictor
m. corrugātor, ōris m	corrugator, muscle that wrinkles
m. depressor, ōris m	depressor muscle
m. dilatātor, ōris m	dilator muscle
m. extensor, ōris m	extensor (muscle)
m. flexor, ōris m	flexor (muscle)
m. levātor, ōris m	levator, elevator muscle
m. massēter, ēris m	chewer muscle
m. rotātor, ōris m	rotator muscle
m. sphincter, ēris m	sphincter (muscle)
m. tensor, ōris m	tensor muscle

N

naris, is f	nostril
nasālis, e	nasal, related to the nose

nasolacrimālis, e	nasolacrimal
nasus, i m	nose
nervōsus, a, um	nervous
nervus, i m	nerve
niger, gra, grum	black
nodus, i m	node
nucha, ae f	nucha, nape of neck
nucleus, i m	nucleus, centre
nutricius, a, um	nutritious

O

obliquus, a, um	oblique
oblongātus, a, um	oblong
occipitālis, e	occipital
occīput, ītis n	back of the head, occiput
ocūlus, i m	eye
oesophāgus, i m (esophāgus)	esophagus, gullet
olecrānon, i n	tip of the elbow
ophthalmīcus, a, um	ophthalmic, related to the eye
optīcus, a, um	optic, visual
orbīta, ae f	orbit, eye-socket
orbitālis, e	orbital, related to the eye-socket
orgānon, i n	organ
os, oris n	mouth
os, ossis n	bone
os hyoideum	hyoid bone
ossēus, a, um	osseous, bony
ostium, i n	opening, ostium
ovālis, e	oval

P

palatīnus, a, um	palatal, palatine
palatoglossus, a, um	palatoglossal
palātum, i n	palate
palpēbra, ae f	eyelid
pancreas, ātis n	pancreas
pancreatīcus, a, um	pancreatic, related to the pancreas
papilla, ae f	papilla, nipple
paries, ētis m	wall
parietālis, e	parietal
pars, partis f	part
patella, ae f	kneepan

pelvīnus, a, um	pelvic
pelvis, is f	pelvis
pelvis renālis	renal pelvis
per (w. acc.)	for, by
perin(a)eum, i n	perineum
periosteum, i n	periosteum
periton(a)eum, i n	peritoneum
pes, pedis m	foot
petrōsus, a, um	petrous, stony
phalanx, ngis f	phalanx
pharyngēus, a, um	pharyngeal, related to the pharynx
pharynx, ngis m	pharynx
pia mater	soft brain membrane
pilus, i m	hair
planus, a, um	plain
pleura, ae f	pleura
plexus, us m	plexus
plica, ae f	fold
pollex, īcis m	thumb
post (w. acc.)	after
posterior, ius	posterior, back
praemolāris, e	premolar (tooth)
primus, a, um	first
pro (w. abl.)	for
processus, us m	process
profundus, a, um	deep
proprius, a, um	proper
protuberantia, ae f	projection
proximālis, e	proximal
proxīmus, a, um	nearest
pterygoideus, a, um	pterygoid, wing-shaped
pulmo, ūnis m	lung
pulmonālis, e	pulmonary, related to the lung
pylōrus, i m	pylorus
pyrāmis, īdis f	pyramid

Q

quadriceps, cip̄tis four-headed, quadriceps

R

radiālis, e radial, related to the forearm bone
radius, i m radius, forearm bone

radix, īcis f	root
ramus, i m	branch
raphe (rhaphe), es f	raphe
recessus, us m	recess
rectālis, e	rectal
rectum, i n	rectum
rectus, a, um	straight
regio, ḍonis f	region
ren, renis m	kidney
renālis, e	renal, related to the kidney
rete, is n	net, network
retīna, ae f	retina
retinacūlum, i n	retinaculum
rotundus, a, um	round
ruber, bra, brum	red

S

sacrālis, e	sacral
sacrum, i n	sacrum
sanguineus, a, um	bloody
sanguis, īnis m	blood
scapūla, ae f	scapula, shoulder blade
secundus, a, um	second
semi-	half
septum, i n	septum, dividing wall
serōsus, a, um	serous
seu	or
simplex, īcis	simple
sine (w. abl.)	without
sinister, tra, trum	left
sinus, us m	sinus
skelēton, i n	skeleton
spatium, i n	space
sphenoidālis, e	sphenoidal, wedge-shaped
spina, ae f	spine
spinālis, e	spinal
spinōsus, a, um	spinous
spleen, splenis m	spleen (Greek)
spongiōsus, a, um	spongy
squama, ae f	squama, scale
squamōsus, a, um	scaly, squamous
stapes, ēdis m	stapes

sternālis, e	sternal, related to the breast bone
sternocostālis e	sternocostal
sternum, i n	sternum, breast bone
stratum, i n	layer
stroma, ātis n	stroma, framework
structūra, ae f	structure
styloideus, a, um	styloid, awl-shaped
sub (w. acc., abl.)	under
sublinguālis, e	sublingual
substantia, ae f	substance
sulcus, i m	groove
supercilium, i n	eyebrow
superficiālis, e	superficial
superficies, ēi f	surface
superior, ius	upper, superior
supra-	above
suprarenālis, e	suprarenal
suprēmus, a, um	the highest
sutūra, ae f	seam, suture
sympathīcus, a, um	sympathetic, sympathetic
symphysis, is f	symphysis
synchondrōsis, is f	synchondrosis
systēma, ātis n	system

T

tegmen, īnis n	tegmen, roof
temporālis, e	temporal
tempus, ḍoris n	temple
tendo, īnis m	tendon
teres, ētis	round
textus, us m	tissue
thalāmus, i m	thalamus
thoracīcus, a, um	thoracic
thorax, ācis m	chest, thorax
thymus, i m	thymus gland
thyr(e)oideus, a, um	thyroid
tibia, ae f	tibia, shinbone
tonsilla, ae f	tonsil
tonsillāris, e	tonsillar, tonsillary
trachēa, ae f	trachea, windpipe
tractus, us m	tract
transversālis, e	transverse
transversus, a, um	transverse
trapezoideus, a, um	trapezoid
triceps, cipītis	three-headed, tricipital

trigemīnus, a, um	trigeminal
truncus, i m	trunk
tuba, ae f	tube
tuber, ēris n	tuber
tubercūlum, i n	tubercle
tuberosītas, ātis f	tuberosity
tunīca, ae f	covering, membrane
tympanīcus, a, um	tympanic

U

ulna, ae f	ulna, elbow bone
urēter, ēris m	ureter
urethra, ae f	urethra
urinarius, a, um	urinary
utērus, i m	uterus, womb

V

vagīna, ae f	vagina, sheath
vaginālis, e	vaginal
valva, ae f	valve
valvūla, ae f	valve, valvule
vas, vasis n	vessel
vena, ae f	vein
vena portae	portal vein
venōsus, a, um	venous
venter, ntris m	belly
ventrālis, e	ventral
venrtricūlus, i m	ventricle (heart chamber)
vertēbra, ae f	vertebra
vertebrālis, e	vertebral
vertex, īcis m	vertex
verus, a, um	true
vesīca, ae f	bladder
vesīca fellea	gallbladder
vesīca urinaria	urinary bladder
vestibūlum, i n	vestibule
viscēra, um n (<i>pl.</i>)	viscera
viscerālis, e	visceral, related to inner organs
vitreus, a, um	vitreous
vomer, ēris m	vomer

Z

zygōma, ātis n	zygoma, cheek-bone
zygomatīcus, a, um	zygomatic

ENGLISH-LATIN ANATOMICAL GLOSSARY

ENGLISH	LATIN
A	
abdomen	abdōmen, īnis n
abdominal	abdominālis, e
abductor muscle	m. abductor, ḫris m
adductor muscle	m. adductor, ḫris m
above	supra-
accessory	accessorius, a, um
acetabulum, cotyloid cavity	acetabūlum, i n
acoustic	acustīcus, a, um
acromion, acromial process	acromion, i n
afferent	affērens, ntis
after	post (w. acc.)
against	contra (w. acc.)
alar	alāris, e
alveolus	alveōlus, i m
and	et
angle	angūlus, i m
anterior, front	anterior, ius
anus	anus, i m
anvil, incus	incus, ūdis f
aorta	aorta, ae f
aperture	apertūra, ae f
apex, top	apex, īcis m
apical	apicālis, e
appendage	appendix, īcis f
arch	arcus, us m
areola	areōla, ae f
arterial	arteriōsus, a, um; arteriālis, e
artery	arteria, ae f
articular	articulāris, e
ascending	ascendens, ntis
atlas, 1 st cervical vertebra	atlas, antis m
atrium (heart chamber)	atrium, i n
auricle, auricula	auricūla, ae f
auricular	auriculāris, e
awl-shaped, styloid	styloideus, a, um
axis, 2 nd cervical vertebra	axis, is m
B	
back	dorsum, i n
back, posterior	posterior, ius

back of the head, occiput	occīput, ītis n
bag, bursa	bursa, ae f
base	basis, is f
before	ante-
belly	venter, ntris m
beneath, under	infra-
between	inter-
bicipital	biceps, cipītis
bile	bilis, is f
biliary, bilious	biliāris, e
black	niger, gra, grum
bladder	vesīca, ae f
blind intestine, caecum	caecum, i n
blood	sanguis, īnis m
bloody	sanguineus, a, um
body	corpus, ḍoris n
bone	os, ossis n
bone marrow	medulla ossium
bony, osseous	osseus, a, um
border, margin	margo, īnis m
bottom, fundus	fundus, i m
brain	encephālon, i n; cerēbrum, i n
branch	ramus, i m
breast bone, sternum	sternum, i n
broad, wide	latus, a, um
bronchus	bronchus, i m
buccinator, cheek muscle	m. buccinātor, ḍoris m
bulb	bulbus, i m
bursa, bag	bursa, ae f

C

calcaneal	calcanēus, a, um
calcar, spur	calcar, āris n
fibula, splint-bone	fibūla, ae f
canal	canālis, is m
capillary	capillāris, e
capsule	capsula, ae f
cardiac	cardiācus, a, um
carotic	carotīcus, a, um
carotid	carōtis, īdis
cartilage	cartilāgo, īnis f
cartilaginous	cartilaginēus, a, um

cavern	caverna, ae f
cavernous	cavernōsus, a, um
cavity	cavum, i n, cavītas, ātis f
caecum, blind intestine	caecum, i n
cell	cellūla, ae f
cellular	cellulāris, e
cerebellar	cerebellāris, e
cerebellum	cerebellum, i n
cerebral, related to the brain	cerebrālis, e
cerebrum, brain	cerēbrum, i n
cervical, related to the neck	cervicālis, e
cervix, neck	cervix, īcis f
cheek muscle, buccinator	m. buccinātor, īris m
chest, thorax	thorax, ācis m
chewer	m. massēter, ēris m
chiasm	chiasma, ātis n
chin	mentum, i n
cilium, eyelash	cilium, i n
circumflex	circumflexus, a, um
clavicle	clavicūla, ae f
clavicular	claviculāris, e
fiiture, narrow slit	fissūra, ae f
covering, membrane	tunīca, ae f
coccygeal	coccygēus, a, um
coccygeal bone, coccyx	coccyx, ygis m
cochlea	cochlea, ae f
cochlear	cochleāris, e
colon	colon, i n
column	columna, ae f
commissure, joining	commissūra, ae f
common	commūnis, e
compounded	compositus, a, um
concha	concha, ae f
constrictor muscle	m. constrictor, īris m
convolution, gyrus	gyrus, i m
coronary	coronarius, a, um
corrugator muscle, that wrinkles	m. corrugātor, īris m
cortex	cortex, īcis m
cortical	corticālis, e
costal	costālis, e
cotyloid cavity	acetabūlum, i n
crack, split, hiatus	hiātus, us m

cranial	craniālis, e
cranium, skull	cranium, i n
crest	crista, ae f
cribrate, sieve-shaped	cribrōsus, a, um
curvature	curvatūra, ae f
curve, twist, flexure	flexūra, ae f

D

deep	profundus, a, um
deltoid	deltoideus, a, um
dense	compactus, a, um
dental, related to the tooth	dentālis, e
depressor muscle	m. depressor, ūris m
descending	descendens, ntis
diaphragm	diaphragma, ātis n
dilator muscle	m. dilatātor, ūris m
diploe	diploē, ēs f
distal	distālis, e
dividing wall, septum	septum, i n
dorsal	dorsālis, e
duct	ductus, us m
duodenal	duodenālis, e
duodenum	duodēnum, i n

E

ear	auris, is f
efferent	effērens, ntis
elbow bone, ulna	ulna, ae f
elevator muscle	m. levātor, ūris m
encephalon, brain	encephālon, i n
esophageal	esophagēus, a, um
esophagus, gullet	oe(e)sophāgus, i m
ethmoid, sieve-shaped	ethmoidālis, e
extensor (muscle)	m. extensor, ūris m
external	externus, a um
extremity, limb	membrum, i n; extremītas, ātis f
eye	ocūlus, i m
eyeball	bulbus ocūli
eyebrow	supercilium, i n
eyelash, cilium	cilium, i n
eyelid	palpēbra, ae f
eye-socket, orbit	orbīta, ae f

F

face, surface	facies, ēi f
facial	faciālis, e
fascia	fascia, ae f
femur, thigh bone	femur, ūris n
fiber, fibra	fibra, ae f
fibrous	fibrōsus, a, um
fibula, splint-bone	fibūla, ae f
fibular, related to the splint-bone	fibulāris, e
finger	digītus, i m
first	primus, a, um
fissure, narrow slit	fissūra, ae f
flank, side	latus, ēris n
flexor (muscle)	m. flexor, ūris m
flexure, curve, twist	flexūra, ae f
fold	plica, ae f
foot	pes, pedis m
foramen, opening	forāmen, īnis n
forearm	antebrachium, i n
forearm bone, radius	radius, i m
forefinger, index	index, īcis m
forehead	frons, ntis f
fornix, vault	fornix, īcis m
fossa, shallow depression	fossa, ae f
four-headed, quadriceps	quadriceps, cipītis
fovea, small pit	fovea, ae f
framework	stroma, ātis n
free	liber, ēra, ērum
front, anterior	anterior, ius
frontal	frontalis, e
fundus, bottom	fundus, i m

G

gallbladder	vesīca fellea
ganglion, nerve node	ganglion, i n
gastric	gastrīcus, a, um
general	generālis, e
gingiva, gum	gingīva, ae f
girdle	cingūlum, i n
gland	glandūla, ae f
globe	globus, i m
glome	glomus, i m

gray	griseus, a, um
great, large	magnus, a, um
greater, larger	major, jus
great toe	hallux, ūcis m
the greatest, the largest	maxīmus, a, um
groove	sulcus, i m
gullet, esophagus	oe(e)sophāgus, i m
gum, gingiva	gingīva, ae f
gyrus, convolution	gyrus, i m

H

hair	pilus, i m
half	semi-
hamulus, hook	hamūlus, i m
hand	manus, us f
hard	durus, a, um
hard brain membrane	dura mater
head	caput, ītis n
heart	cor, cordis n
hepatic, related to the liver	hepatīcus, a, um
hiatus, crack, split	hiātus, us m
the highest	suprēmus, a, um
hollow	cavus, a, um
horizontal	horisontālis, e
horn	cornu, us n
humerus, upper arm	humērus, i m
humor	humor, ūris m
hyoid (bone)	hyoideus, a, um
hyoid bone	os hyoideum
hypogastric	hypogastrīcus, a, um
hypoglossal (nerve)	hypoglossus, a, um

I

ileocecal	ileocaecālis, e
ileum	ileum, i n
iliac	iliācus, a, um
impression	impressio, ūnis f
incisive (tooth)	incisīvus, a, um
index, forefinger	index, īcis m
inferior, lower	inferior, ius
inner	internus, a, um
intercostal	intercostālis, e
internal	internus, a, um

interosseal	interosseus, a, um
intestinal	intestinālis, e
intestine	intestīnum, i n
intravenous	intravenōsus, a, um
iris of the eye	iris, irīdis f
ischiatric	ischiadīcus, a, um
ischiorectal	ischiorectālis, e
ischium	ischium, i n

J

jejunum	jejūnum, i n
joining, comissure	commissūra, ae f
joint	articulatio, ūnis f
jugular	jugulāris, e

K

kidney	ren, renis m
knee	genu, us n
kneepan	patella, ae f

L

lacrimal, related to tears	lacrimālis, e
lamina, plate	lamīna, ae f
large, great	magnus, a, um
larger, greater	major, jus
large intestine	intestīnum crassum
the largest, the greatest	maxīmus, a, um
laryngeal, related to the larynx	laryngēus, a, um
larynx	larynx, yngis m
lateral	laterālis, e
layer	stratum, i n
left	sinister, tra, trum
leg, shin	crus, cruris n
lens	lens, lentis f
levator muscle	m. levātor, ūris m
ligament	ligamentum, i n
limb, extremity	membrum, i n; extremītas, ātis f
line	linea, ae f
lingual, related to the tongue	linguālis, e
lip	labium, i n
liver	hepar, ātis n
lobe	lobus, i m

loin	lumbus, i m
long	longus, a, um
the longest	longissimus, a, um
lower, inferior	inferior, ius
lower jaw, mandible	mandibula, ae f
lumbar, related to the loin	lumbalis, e
lung	pulmo, onis m
lymphatic	lymphaticus, a, um

M

man	homo, īnis m
mandible, lower jaw	mandibula, ae f
mandibular, related to the lower jaw	mandibularis, e
manubrium	manubrium, i n
margin, border	margo, īnis m
marrow, medullary substance	medulla, ae f
mastoidal, mammiform	mastoideus, a, um
maxilla, upper jaw	maxilla, ae f
maxillary, related to the upper jaw	maxillaris, e
meatus, passage	meatus, us m
medial	mediālis, e
median, middle	mediānus, a, um
membrane, covering	membrāna, ae f
membrane of the brain or spinal cord	mater, tris f
meninx	meninx, ngis f
mental, related to the chin	mentālis, e
metacarpus	metacarpus, i m
metatarsus	metatarsus, i m
middle	medius, a, um; mediānus, a, um
mouth	os, oris n
mucous	mucōsus, a, um
mucous membrane	mucōsa, ae f
muscle	musculus, i m
muscular	musculāris, e

N

nape of neck, nucha	nucha, ae f
narrow slit, fissure	fissūra, ae f
nasal, related to the nose	nasālis, e
nasolacrimal	nasolacrimālis, e
the nearest	proxīmus, a, um
neck	collum, i n; cervix, īcis f

nerve	nervus, i m
nerve node	ganglion, ii n
nervous	nervōsus, a, um
net, network	rete, is n
nipple, papilla	papilla, ae f
node	nodus, i m
nose	nasus, i m
nostril	naris, is f
notch	incisūra, ae f
nucha, nape of neck	nucha, ae f
nucleus, centre	nucleus, i m
nutritious	nutricius, a, um

O

oblique	obliquus, a, um
oblong	oblongātus, a, um
occiput, back of the head	occīput, ītis n
occipital	occipitālis, e
opening, foramen	forāmen, īnis n
ophthalmic, related to the eye	ophthalmīcus, a, um
optic, visual	optīcus, a, um
or	seu
orbit, eye-socket	orbīta, ae f
orbital, related to the eye-socket	orbitālis, e
organ	orgānon, i n
osseous, bony	ossēus, a, um
ostium, opening	ostium, i n
oval	ovālis, e

P

palatal, palatine	palatīnus, a, um
palate	palātum, i n
palatoglossal	palatoglossus, a, um
pancreas	pancreas, ātis n
pancreatic, related to the pancreas	pancreaticus, a, um
papilla, nipple	papilla, ae f
parietal	parietālis, e
part	pars, partis f
passage, meatus	meātus, us m
pelvic	pelvīnus, a, um
pelvis	pelvis, is f
perineum	perin(a)eum, i n

periosteum	periosteum, i n
peritoneum	periton(a)eum, i n
petrous, stony	petrōsus, a, um
phalanx	phalanx, ngis f
pharyngeal, related to the pharynx	pharyngēus, a, um
pharynx	pharynx, ngis m
plain	planus, a, um
plate, lamina	lamīna, ae f
pleura	pleura, ae f
plexus	plexus, us m
portal vein	vena portae
posterior, back	posterior, ius
premolar (tooth)	praemolāris, e
process	processus, us m
projection	protuberantia, ae f
proper	proprius, a, um
proximal	proximālis, e
pterigoid, wing-shaped	pterygoideus, a, um
pulmonary, related to the lung	pulmonālis, e
pylorus	pylōrus, i m
pyramid	pyrāmis, īdis f

Q

quadriceps, four-headed

quadriceps, cipītis

R

radial, related to the forearm bone	radiālis, e
radius, forearm bone	radius, i m
raphe	raphe (rhaphe), es f
recess	recessus, us m
rectal	rectālis, e
rectum	rectum, i n
red	ruber, bra, brum
region	regio, īnis f
renal, related to the kidney	renālis, e
renal pelvis	pelvis renālis
retina	retīna, ae f
retinaculum	retinacūlum, i n
rib	costa, ae f
right	dexter, tra, trum
root	radix, īcis f
rotator muscle	m. rotātor, īris m
rough	asper, ēra, ērum
round	rotundus, a, um; teres, ītis

S

sacral	sacrālis, e
sacrum	sacrum, i n
scapula, shoulder blade	scapūla, ae f
second	secundus, a, um
septum, dividing wall	septum, i n
serous	serōsus, a, um
shallow depression, fossa	fossa, ae f
sheath, vagina	vagīna, ae f
shin, leg	crus, cruris n
shinbone, tibia	tibia, ae f
short	brevis, e
shoulder	brachium, i n
shoulder blade, scapula	scapūla, ae f
side, flank	latus, ēris n
sieve-shaped, cribrate	cribrōsus, a, um
sieve-shaped, ethmoid	ethmoidālis, e
simple	simplex, īcis
sinus	sinus, us m
skeleton	skelēton, i n
skin	cutis, is f
skull, cranium	cranium, i n
small intestine	intestīnum (i) tenue (is)
smaller	minor, minus
the smallest	minīmus, a, um
small pit, fovea	fovea, ae f
soft brain membrain	pia mater
space	spatium, i n
sphenoidal, wedge-shaped	sphenoidālis, e
sphincter (muscle)	m. sphincter, ēris m
spinal	spinālis, e
spinal cord, spinal marrow	medulla spinālis
spine	spina, ae f
spinous	spinōsus, a, um
spleen	lien, liēnis m; splen, splenis m
splint-bone, fibula	fibūla, ae f
split, crack, hiatus	hiātus, us m
spongy	spongiōsus, a, um
spur, calcar	calcar, āris n
squama, scale	squama, ae f
squamous, scaly	squamōsus, a, um
stapes	stapes, ēdis m

sternal, related to the breast bone	sternālis, e
sternocostal	sternocostālis e
sternum, breast bone	sternum, i n
stomach	gaster, tris f
stony, petrous	petrōsus, a, um
straight	rectus, a, um
stroma, framework	stroma, ātis n
structure	structūra, ae f
sublingual	sublingualis, e
substance	substantia, ae f
superficial	superficiālis, e
surface	superficies, ēi f
superior, upper	superior, ius
suprarenal	suprarenālis, e
surface, face	facies, ēi f
suture, seam	sutūra, ae f
sympathetic, sympathetic	sympathīcus, a, um
symphysis	symphysis, is f
synchondrosis	synchondrōsis, is f
system	systēma, ātis n

T

tegmen, roof	tegmen, īnis n
temple	tempus, ḍoris n
temporal	temporālis, e
tendon	tendo, īnis m
tensor muscle	m. tensor, ḍoris m
thalamus	thalāmus, i m
thigh, thigh bone, femur	femur, ḍoris n
thoracic	thoracīcus, a, um
thorax, chest	thorax, ācis m
three-headed, tricipital	triceps, cipītis
thumb	pollex, īcis m
thymus gland	thymus, i m
thyroid	thyr(e)oideus, a, um
thyroid gland	glandūla thyr(e)oidea
tibia, shin bone	tibia, ae f
top, apex	apex, īcis m
tip of the elbow	olecrānon, i n
tissue	textus, us m
tongue	lingua, ae f
tonsil	tonsilla, ae f

tonsillar, tonsillary	tonsillāris, e
tooth	dens, dentis m
top, apex	apex, īcis m
trachea, windpipe	trachēa, ae f
tract	tractus, us m
transverse	transversālis, e; transversus, a, um
trapezoid	trapezoideus, a, um
tricipital, three-headed	triceps, cip̄itis
trigeminal	trigemīnus, a, um
true	verus, a, um
trunk	truncus, i m
tube	tuba, ae f
tuber	tuber, ēris n
tubercle	tubercūlum, i n
tuberosity	tuberosītas, ātis f
two-headed, bicipital	biceps, cip̄itis
tympanic	tympanīcus, a, um

U

ulna, elbow bone	ulna, ae f
under, beneath	infra-; sub-
upper, superior	superior, ius
upper arm	humērus, i m
upper jaw, maxilla	maxilla, ae f
ureter	urēter, ēris m
urethra	urethra, ae f
urinary	urinarius, a, um
urinary bladder	vesīca urinaria
uterus, womb	utērus, i m

V

vagina, sheath	vagīna, ae f
vaginal	vaginālis, e
valve	valva, ae f; valvūla, ae f
vault, fornix	fornix, īcis m
vein	vena, ae f
venous	venōsus, a, um
ventral	ventrālis, e
ventricle (heart chamber)	venrtricūlus, i m
vertebra	vertēbra, ae f
vertebral	vertebrālis, e
vertex	vertex, īcis m

vessel	<i>vas, vasis</i> n
vestibule	<i>vestibulum, i</i> n
viscera	<i>viscera, um</i> n (pl.)
viscerālis, e	visceral, realted to the inner organs
visual	<i>opticus, a, um</i>
vitreous	<i>vitreus, a, um</i>
vomer	<i>vomer, ēris</i> m

W

wall	<i>paries, ētis</i> m
wedge-shaped, sphenoidal	<i>sphenoidālis, e</i>
white	<i>albus, a, um</i>
wide, broad	<i>latus, a, um</i>
the widest	<i>latissimus, a, um</i>
windpipe, trachea	<i>trachēa, ae</i> f
wing	<i>ala, ae</i> f
wing-shaped, pterigoid	<i>pterygoideus, a, um</i>
womb, uterus	<i>utērus, i</i> m
wrist	<i>carpus, i</i> m

Y

yellow	<i>flavus, a, um</i>
--------	----------------------

Z

zygoma	<i>zygōma, ātis</i> n
zygomatic	<i>zygomatičus, a, um</i>

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