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## ИНДЕКС ЛЕКСИКО-ГРАММАТИЧЕСКИХ УПРАЖНЕНИЙ

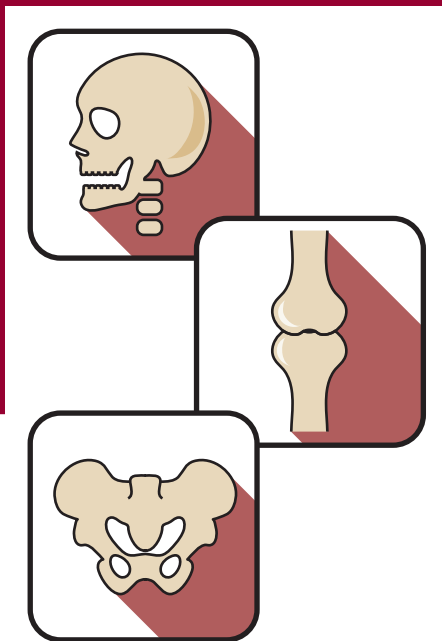
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## Индекс лексико-грамматических упражнений

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### Значения слов:

“as”	— Unit 6 task 12
“as well as”	— Unit 16 task 10C
“common”	— Unit 2 task 9C
“damage”	— Unit 1 task 11
“depending on”	— Unit 16 task 10C
“due to”	— Unit 1 task 10C
“examination”	— Unit 1 task 3D
“mean”	— Unit 2 task 9C
“one”	— Unit 3 task 9
	— Unit 7 task 3F
“only”	— Unit 4 task 8
“primitive”	— Unit 1 task 3D
“supply”	— Unit 1 task 11



## UNIT

# I

## BODY SYSTEMS: THE SKELETAL SYSTEM

**Module I. Learning to Read and Understand  
a Special Text — *The Skeleton***

**Module II. Learning to Translate  
*Pathology: Bone Fractures***

Note for translation (I) — *Types of Predicates*

Note for translation (II) — *Construction “the ... the ...”*

Texts for translation

**Module III. Learning to Communicate**

***Nursing care: Case history***

***Drug therapy***

***Laboratory diagnostics***

**Check your progress: seminar “Bone Fractures”**





## MODULE I. LEARNING TO READ AND UNDERSTAND A SPECIAL TEXT

Task 1. The word “science” means *knowledge*. There are many branches of the science, which you will study to become specialists in healthcare.

**A.** Match the sciences (1–8) with their areas of study (a–h):

1) anatomy	a — environment
2) <i>biology</i>	b — matter and forces
3) chemistry	<b>c</b> — <i>living things</i>
4) ecology	d — language
5) histology	e — the structure of living organisms
6) linguistics	f — the structure of tissues
7) meteorology	g — substances and their reactions
8) physics	h — weather

1) — \_\_; **2) — c**; 3) — \_\_; 4) — \_\_; 5) — \_\_; 6) — \_\_; 7) — \_\_; 8) — \_\_.

**B.** Using the table above, make up sentences.

Example: Biology studies living things.

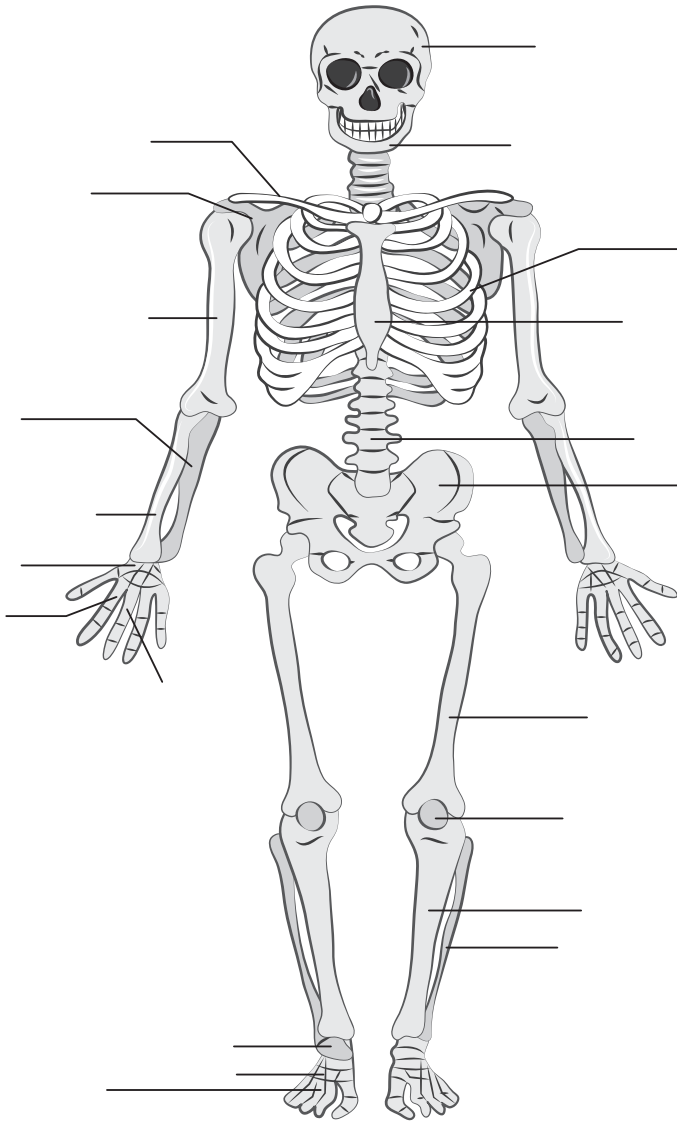
1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_

Task 2. Studying anatomy, you will learn the names of bones. Did you know that the skeleton of an adult human consists of 206 bones?

**A.** Using the words from Box A, label the Russian names of bones in the given diagram.

### Box A

бедренная кость, грудина, запястье, колено, конечность, плечо, позвонок, позвоночник, ребро, сустав, таз, челюсть, череп



**B.** Using the words from Box B, find an English term for each bone and fill in the table:

**Box B**

backbone, bone, coccyx, **femur**, framework, jaw, joint, limb, knee, pelvis, rib, sacrum, shoulder, skull, sternum, vertebra, wrist

## Unit I. Body Systems: The Skeletal System

Russian terms	English terms	Pronunciation
бедренная кость	<i>femur</i>	['fi:mə]
грудина		
запястье		
колени		
конечность		
копчик		
кость		
крестец		
остов (каркас)		
плечо		
позвонок		
позвоночник		
ребро		
сустав		
таз		
челюсть		
череп		

**C.** Read the English names of bones in the table.

### Task 3.

**A.** Read and translate the following international words: biological, chronic, function, group, infection, system, type.

**B.** Match the words of the Latin origin on the left (A) with their English equivalents on the right (B).

A	B
<i>cranium</i>	backbone
femur	framework
to form	inner
internal	to make up
mandible	<i>skull</i>
skeleton	lower jaw
vertebral column	thigh

- |            |       |
|------------|-------|
| 1) cranium | skull |
| 2) _____   | _____ |
| 3) _____   | _____ |
| 4) _____   | _____ |
| 5) _____   | _____ |
| 6) _____   | _____ |
| 7) _____   | _____ |

**C.** Translate the words with the same roots. (If you know the meanings of suffixes, you can easily recognize nouns and adjectives.)

- 1 — skelet**on**, skelet**al** \_\_\_\_\_
- 2 — pelvis, pelv**ic** \_\_\_\_\_
- 3 — protect**ion**, protect**ive** \_\_\_\_\_
- 4 — cranium, cran**ial** \_\_\_\_\_
- 5 — bone, bon**y** \_\_\_\_\_
- 6 — infect**ion**, infect**ive** \_\_\_\_\_
- 7 — move, mov**able** \_\_\_\_\_
- 8 — vertebra, verteb**ral** \_\_\_\_\_

**D.** Find the meanings of the words given below in the dictionary and translate the following sentences:

- examination (n) 1) \_\_\_\_\_ ; 2) \_\_\_\_\_  
primitive (a) 1) \_\_\_\_\_ ; 2) \_\_\_\_\_

1. Examination is a test of a student's knowledge or skill in a particular subject.

2. Medical examination includes a variety of tests depending on the age, sex and health of the person.

3. A complete physical examination usually starts at the head and proceeds all the way to the toes.

4. At the end of each semester students take examinations.

5. Monotremes (отряд однопроходных) are the most primitive mammals.

6. Support is the most primitive and the oldest function of the skeleton.

7. Primitive people used magic to cure diseases.

**Task 4.** Now you are going to read a text about the human skeleton.

**A.** Read and translate the headings for the paragraphs of the text "The Skeleton":

- 1 — Functions of the skeleton
- 2 — Skeletal system of the body
- 3 — Structure of the pelvis
- 4 — Bony framework of the head

**B.** Look through the text and match each heading with the correct paragraph.

### THE SKELETON

1 \_\_\_\_\_

Man, as a member of the great group of vertebrates, has an internal skeleton as a framework for his body. There are more than 200 bones

## Unit I. Body Systems: The Skeletal System

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in the human skeleton. Collectively they make up the skeletal system of the body. There are two parts of the skeleton: the axial skeleton, 80 bones, and the appendicular skeleton, 126 bones. The bones of the limbs form the appendicular skeleton. The axial skeleton includes the skull, the backbone, and the ribs and sternum. The most important of these is the backbone, or vertebral column; it consists of 26 separate bones, the vertebrae, one on top of the other.

2 \_\_\_\_\_

At the top of the backbone there is the skull, the bony framework of the head. It includes more than twenty bones and consists of two parts, the cranium and the facial section. The cranium is the top, back, and sides of the skull. At birth, the skull joints are flexible and remain so until around the second year of life. The facial bones are smaller and more complex than the cranial bones. None of them is movable, except the mandible.

3 \_\_\_\_\_

At the lower end of the backbone, there is the pelvic girdle. This girdle and the last two bones of the backbone, the sacrum and the coccyx, form the pelvis. In each side of the pelvis there is a socket into which the femur, or thigh bone, fits. Man's erect posture is dependent upon the structure of the pelvis.

4 \_\_\_\_\_

The functions of the skeleton are of three different types — support, protection and motion. Some bones have chiefly a protective function. An example is the skull, which encloses the brain, the back of the eyeball, and the inner ear. Some, such as pelvis, furnish the main support for the body. Other bones, such as jaw and the bones of the fingers, help the body move. Of these functions, support is the most primitive and the oldest.

### Task 5.

**A.** *Fill in the gaps with the anatomical terms from the box. (Use the dictionary if necessary.)*

appendicular, axial, backbone, flexible, girdle, ribs, skull, vertebrae

1. There are two parts of the skeleton: the ... skeleton and the ... skeleton.
2. The axial skeleton includes the ..., the ..., and the ... and sternum.
3. The backbone consists of 26 separate bones, the ...
4. At birth, the skull joints are ...

5. At the lower end of the backbone, there is the pelvic ...

**B.** Read and translate the sentences.

Task 6.

**A.** Join the two parts from the table to make complete sentences.

(If you are not sure, you can find the sentences in the text.)

1. Man has an internal skeleton	a) form the appendicular skeleton
2. The bones of the limbs ...	b) than the cranial bones
3. The pelvic girdle, the sacrum and the coccyx	c) the bony framework of the head
4. Man's erect posture is dependent upon...	d) as a framework for his body
5. The skull is ...	e) the structure of the pelvis
6. The facial bones are smaller ...	f) form the pelvis

**1 — d;** 2 — \_\_; 3 — \_\_; 4 — \_\_; 5 — \_\_; 6 — \_\_.

**B.** Read and translate the sentences.

Task 7.

Check your knowledge of the structure and functions of the human skeleton and complete the outline of the text "The Skeleton".

The skeletal system of the body: 206 bones

a) the axial skeleton — ... bones (the backbone — ... bones)

b) the appendicular skeleton — ... bones.

The skull:

a) the cranium

b) the ...

c) ...

The pelvis:

a) the pelvic ...

b) the ...

c) the coccyx

The functions of the skeleton:

a) protection

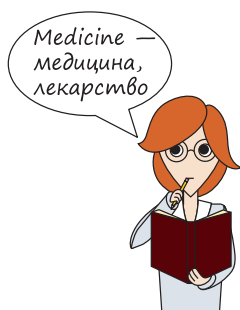
b) ...

c) motion

Task 8.

Now you can answer the following questions. (Your answers will be a summary (a brief overview of the main points) of the text "The Skeleton").

1. What kind of skeleton does man have?
2. Which bones form the appendicular skeleton?
3. Which bones form the axial skeleton?
4. Which bones form the pelvis?
5. Which bone in the skull is movable?
6. What are the functions of the skeleton?
7. What function is the most primitive and the oldest?



## MODULE II. LEARNING TO TRANSLATE

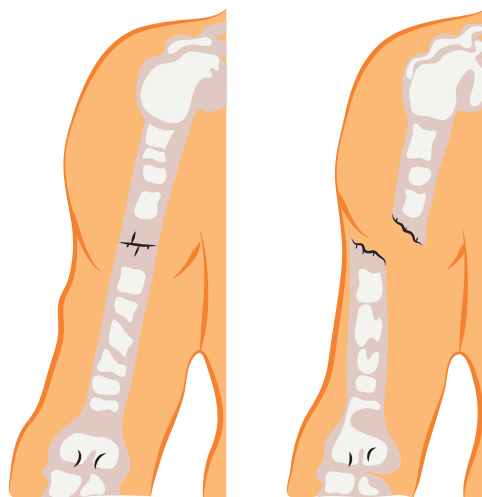
### PATHOLOGY: BONE FRACTURES

#### Task 9.

**A.** Look through the text “Fractures” and define its main ideas.

### FRACTURES

A fracture is a crack or break in a bone. Fractures can be “simple” or closed, and “compound” or open. A simple fracture is a fracture in which the bone itself is broken, but the muscles and other tissues are undamaged. In a compound fracture there is significant damage of surrounding tissues, including the skin, arteries or other organs. The area around the fracture swells up due to the bleeding around the place where the bone is broken.



Simple

Compound

All fractures require medical treatment. Good first aid care of fractures is always important. Immediate first aid consists of using splints, padding, bandages, slings and swathes depending on the kind of fracture. Bone fractures are typically treated by restoring the pieces of the bone to their natural positions (if necessary), and maintaining those positions while the bone heals. Usually the fractured bone area is immobilized for two to eight weeks.

The human body needs adequate supplies of calcium for healthy bones. Milk, cheese, yoghurt and dark green leafy vegetables are good sources of calcium. Vitamin D increases the absorption of calcium in the body and has a role in maintaining bone density. Exposure to sunlight, as well as eating eggs and oily fish are good ways of getting vitamin D. Exercise can help strengthen bones by increasing bone density. The more weight-bearing exercises you do, the stronger and denser your bones will be. Examples of such exercises include skipping, walking, running, and dancing.

**B.** Read the text again and give a title to each paragraph.

1 — Description of fractures

2 — \_\_\_\_\_

3 — \_\_\_\_\_

Task 10.

**A.** Read the transcriptions of the given words, write down these words in the first column and their meanings in the third column of the table:

spelling of the word	transcription of the word	meaning of the word
fracture	['fræktʃə]	трещина, перелом
	['kræk]	
	[breɪk]	
	['dæmɪdʒ]	
	['ɛəriə]	
	[swel]	
	['blɪdɪŋ]	
	['trɪtmənt]	
	[eɪd]	
	['splɪnt]	
	['pædɪŋ]	
	['bændɪdʒ]	
	[slɪŋ]	



spelling of the word	transcription of the word	meaning of the word
	[sweɪð]	
	[rɪ'stɔɪrɪŋ]	
	[hi:l]	
	[prɪ'ven(t)ʃ(ə)n]	
	[sə'plɑɪ']	
	[sɔ:s]	
	['densɪtɪ]	
	[ɪk'spəʊzə]	
	[rɪ'kwaɪə]	
	[sɪg'nɪfɪkənt]	

**B.** Find in the text “Fractures” English equivalents for the following phrases:

- 1) повреждение близлежащих тканей \_\_\_\_\_
- 2) область вокруг перелома \_\_\_\_\_
- 3) наложение шины \_\_\_\_\_
- 4) сопоставление фрагментов кости в естественную позицию (т.е. репозиция) \_\_\_\_\_
- 5) быть обездвиженным \_\_\_\_\_
- 6) достаточное поступление кальция \_\_\_\_\_
- 7) здоровые кости \_\_\_\_\_
- 8) источник (кальция) \_\_\_\_\_
- 9) пребывание на солнце \_\_\_\_\_
- 10) упражнения для опорно-двигательного аппарата \_\_\_\_\_

**C.** Find in the dictionary the meaning of the given word combinations, which are frequently used in scientific texts, and translate the following sentences.

**due to** — \_\_\_\_\_

**depending on** — \_\_\_\_\_

**as well as** — \_\_\_\_\_

1. The area around the fracture swells up due to the bleeding.
2. Immediate first aid consists of using splints, padding, bandages, slings and swathes depending on the kind of fracture.
3. Exposure to sunlight, as well as eating eggs and oily fish are good ways of getting vitamin D.
4. The body relies on three macronutrients: protein, carbohydrates and fat, as well as many micronutrients.
5. Due to its peculiar blood supply, the talus usually needs operative treatment.

6. Depending on the severity of the fracture, a person might need surgery.

**Note for translation (I)**

При поиске подлежащего и сказуемого (т.е. ядра предложения), что необходимо для правильного понимания смысла предложения и грамотного перевода на русский язык, следует опираться на формальную структуру английского предложения:

- Следует помнить, что английское предложение, в отличие от русского предложения со свободным порядком слов, имеет фиксированный порядок слов, т.е. **подлежащее всегда предшествует сказуемому**.
- Форма сказуемого указывает на **залог** (*действительный или страдательный*), **время** (*настоящее, прошедшее или будущее*) и **характер действия** (*обычное, или длящееся в определенный момент, или завершенное к определенному моменту*).
- Сказуемое обозначает действие, свойство, состояние подлежащего и всегда выражается *личной формой глагола*. По структуре сказуемые делятся на **простые** и **составные**. Составные сказуемые, в свою очередь, делятся на *именные* и *глагольные*.

**Простое сказуемое** в английском языке выражено личной формой глагола любого времени и залога.

*Примеры:* 1) The area around the fracture swells up.

(настоящее время группы Simple, действительный залог)

2) The bone is broken.

(настоящее время группы Simple, страдательный залог)

**Составное глагольное сказуемое** состоит из глагола в личной форме и инфинитива или герундия. В качестве глагола в личной форме могут выступать модальные глаголы или глаголы, которые выражают начало, продолжение или конец действия, а также отношение к нему действующего лица (to begin, to start, to continue, to want, to decide, to intend и другие).

*Пример:* Fractures **can be** simple or compound.

**Составное именное** сказуемое включает: 1) глагол-связку *to be* в личной форме (т.е. согласующейся с подлежащим в лице и числе) и 2) именную часть (например, существительное или прилагательное). *Пример:* A fracture is a break in a bone.

Task 11.

**A.** Study the meaning of the following words:

a) **damage**

## Unit I. Body Systems: The Skeletal System

*n* — вред, повреждение; дефект, поломка; убыток, ущерб, урон; порча

*v* — повреждать, портить, наносить ущерб

### b) **supply**

*n* — поставка, снабжение

*v* — 1. поставлять; 2. снабжать

**B.** Before translating the following sentences, find the subject and predicate in each sentence and define the part of speech of the highlighted words:

Example: **The body needs** a constant *supply* (**n**) of vitamin C.

1. In a compound fracture there is significant *damage* (...) of surrounding tissues.

2. A doctor diagnoses the extent and exact nature of the *damage* (...).

3. Fractures, which extend into joints, usually *damage* (...) the cartilage.

4. Vitamin E protects the body's tissues and cells from *damage* (...).

5. The human body needs adequate *supplies* (...) of calcium for healthy bones.

6. Vitamin C *supplies* (...) body needs for vital processes.

7. New tissue needs blood *supply* (...).

### Task 12.

**A.** Analyze each sentence in the text "Fractures": underline its main parts — the subject and the predicate.

Example: A simple *fracture* **is a fracture** in which *the bone* itself **is broken**, but *the muscles and other tissues* **are undamaged**.

**B.** Write out from the text all sentences with the predicate in the Passive Voice and translate them.

1. A simple fracture is a fracture in which the bone itself is broken but the muscles and other tissues are undamaged.

Простой перелом — это перелом, при котором сломана сама кость, а мышцы и другие ткани не повреждены.

2. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Note for translation (II)**

**Сравнительно-сопоставительная конструкция “the ... the ...” (the + прилагательное в сравнительной степени)** употребляется при сравнениях типа «**чем ..., тем**»:

*Пример:* **The more** weight-bearing exercises you do, **the stronger and denser** your bones will be.

Чем больше вы делаете упражнений для опорно-двигательного аппарата, тем сильнее и прочнее будут ваши кости.

Task 13.

**A.** Match the beginning of the sentence (1–7) with the ending (a–g).

1. The more exercises you do	a) the higher the blood sugar level
2. The more active you are	b) the faster you will lose weight
3. The more protein you eat	c) the better it can produce all kinds of information
4. The less you eat and the more active you are	d) the stronger your bones will be
5. The smaller the size of the organism	e) the stronger your muscles will be
6. The more connections the brain produces	f) the faster the heartbeat
7. The more intense the stress	g) the more fluid you need

**1 — D; 2 — \_\_; 3 — \_\_; 4 — \_\_; 5 — \_\_; 6 — \_\_; 7 — \_\_.**

**B.** Translate the sentences with the construction “the ... the ...”.

Task 14.

Put the following sentences in the logical order to make a mini-text which will be a summary (a brief overview of the main points) of the text “Fractures”.

1. The human body needs adequate supplies of calcium for healthy bones.
2. Fractures can be “simple” or closed, and “compound” or open.
3. Bone fractures are typically treated by restoring the fractured pieces of the bone to their natural positions.
4. All fractures require medical treatment.

### Task 15.

**A.** Now you are ready to translate the text “Fractures”. (If necessary, use a dictionary.)

**B.** Compare your translations and define the best one. Explain your choice.

### Task 16. Mini-texts for translation:

1. Fractures may be caused by trauma, by twisting due to muscle spasm, or by diseases that result in osteopenia. Symptoms of fractures usually begin with pain that increases with movement. The skin in the area may be pale, and an obvious deformity may be present. The first stage in the treatment of a fracture is called reduction. This involves placing the bone ends together so that they are in contact with one another.

2. A fracture usually results from traumatic injury to a bone. Fracture classifications include simple or compound, and incomplete or complete. Simple fractures (often called “closed”) are not obvious as the skin has not been ruptured and remains intact. Compound fractures (commonly called “open”) break the skin, exposing bone and causing additional soft tissue injury and possible infection.

3. Anyone can experience a fracture. Most fractures are accompanied by intense pain when the initial injury occurs. It may become worse when you move. If you suspect you have a fracture, get medical attention immediately. A doctor will likely order X-rays, which are the most common method of fracture diagnosis. They can create images of a bone and reveal breaks or other signs of damage.

4. If you’re diagnosed with a fracture, the treatment plan will depend on its type and location. In general, a doctor will try to put the broken bone pieces back into their proper positions and stabilize them as they heal. During the healing process, new bone will form around the edges of the broken pieces. A doctor may also prescribe medication to control pain, fight infection, or manage other symptoms or complications.

5. You can’t prevent all fractures. But you can work to keep your bones strong so they’ll be less susceptible to damage. To maintain your bone strength, consume a nutritious diet, including foods that are rich in calcium and vitamin D. It’s also important to exercise regularly. Weight-bearing exercises are particularly helpful for building and maintaining bone strength.

6. Each person’s healing process is different and depends on the location of the fracture and how severe it is, as well as the patient’s

age and nutritional status. The older a person is, the longer it takes for a bone to heal; a child may recover within a few weeks, and an elderly person may take several months. At all ages, some bones will heal faster than others. An arm may heal in a month, but a leg may take up to six months.

7. Most human bones are strong and can generally stand up to fairly strong forces. However, if that force is too powerful, or there is something wrong with the bone, it can fracture. The older we get, the less force our bones can withstand. The patient's age, the type of a fracture, as well as the patient's general health are all factors which influence how rapidly the bone heals. If the patient smokes regularly, the healing process will take longer.



## MODULE III. LEARNING TO COMMUNICATE

### FOCUS ON VOCATION: PATIENTS WITH FRACTURES

#### I. INTRODUCTORY TALK

##### Task 17. Pair Work

**A.** Ask each other the following questions:

1. Have you ever broken your bone? (Yes, I have/ No, I have not.)
2. If you have, which bone was broken? (My ... was broken.)
3. How long was your bone immobilized? (For ... weeks.)

**B.** Tell your classmates about your friend's experience in connection with his/her fracture. Use the following patterns:

My friend has broken his/her ...

The area around the fracture swelled up due to the ...

The fractured bone area was immobilized for ...



#### II. NURSING CARE OF PATIENTS WITH FRACTURES

##### Task 18.

**A.** Choose the field of medicine which deals with bone fractures:

- a) dentistry b) cardiology c) psychiatry d) traumatology

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**B.** Read the case history and mark the statements given below which are true:

**Case history.** Melissa Gordon, 25 years old, a manager, is admitted to hospital after an accident in the street. According to her words, she was walking with her child in the park and suddenly fell down. Her husband drove her to the nearest hospital. She complains of a severe pain in the right ankle and difficulty with moving her leg. On examination there is a swelling, deformity of the right ankle. There is a bruise and restriction of mobility in the right limb. The patient is a bit nervous. The doctor diagnoses a closed fracture of the right tibia.

1. The patient is admitted to hospital after an accident at home.
2. She was running with her child in the park when she fell down.
3. Her husband drove her to the nearest hospital.
4. She complains of a mild pain in the right ankle.
5. The patient is very nervous.

**C.** Read the case history again and write out medical terms and word combinations:

a) those that are names of body parts:

*ankle* — лодыжка

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b) those which describe symptoms:

*pain* — боль

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**D.** Read the case history again and say what the sex, age, occupation, and marital status of the patient are.

**E.** Answer the questions a nurse typically asks a patient.

1. What's your name?
2. How old are you?
3. When were you injured?
4. Where do you feel the pain?
5. Who brought you to the hospital?

**F. Pair work (Mini-role play) A NURSE TALKS TO A PATIENT**

*Student 1 acts as a nurse* who asks a patient questions before the doctor's arrival (use the questions in task 18-E).

*Student 2 acts as a patient* and answers the questions a nurse asks before the doctor's arrival (use information from the case history — task 18B).

Student 1	Student 2
I need to fill in your medical record Now I'd like to know some details of your injury	My name is ... As for my present condition, I can say ...

**III. DRUG THERAPY FOR FRACTURES**

Task 19.



**A.** Do you know which medicines are used to control pain:

a) corticosteroids; b) analgesics; c) stimulants?



**B.** Look through the following passage and find the sentence, which confirms your answer.

Acetaminophen (paracetamol) is a pain reliever normally used in lessening fever; it does not have as many side effects as, for example, aspirin. However, since acetaminophen is just an analgesic — a painkiller — it does not work to reduce inflammation. Therefore, if you have any inflammation around the fracture and that inflammation is pressing on a nerve, acetaminophen will not be able to reduce the inflammation. All it does is block your brain from receiving pain messages.

The normal maximum dose for acetaminophen per day is 65 mg/kg or 4 grams per day. Acetaminophen should not be used for over two weeks without seeking medical advice. It is essential to avoid excessive amounts of acetaminophen as this may cause damage to the liver or kidneys.

**C.** Fill in the table to make a short description of the drug according to the text.

Name of the drug	
Medicinal form	
Class of the drug	
Indications	
Contraindications	
Effect on the body	
Timing and dosage	



Route of administration	
Side effects	
Drug interactions	
Storage conditions	

**D.** Match the English word combinations with their translations:

1) relieve pain	а) обратиться к врачу
2) lessen fever	б) обычная доза
3) side effects	в) чрезмерные количества
4) reduce inflammation	г) вызвать повреждение
5) normal dose	д) побочные действия
6) seek medical advice	е) облегчить боль
7) excessive amounts	ж) уменьшить воспаление
8) cause damage	з) снизить температуру

1) — \_\_; 2) — \_\_; 3) — \_\_; 4) — \_\_; 5) — \_\_; 6) — \_\_; 7) — \_\_; 8) — \_\_.

**E.** Read the passage again and find answers to the following questions:

1. Is acetaminophen an analgesic?
2. When are analgesics used?
3. Can you name other analgesics?
4. If we compare acetaminophen and aspirin, which has more side effects?
5. What are the side effects of acetaminophen?
6. Does acetaminophen reduce inflammation?
7. How does it work?
8. What is the normal maximum dose for acetaminophen per day?

**F.** Pair work (Mini-role play) AT THE CHEMIST'S

*Student 1 acts as Melissa's husband*, who has come to the chemist's to buy a pain-killer (use some questions in task 19E).

*Student 2 acts as a chemist* and answers the customer's questions (use the information in the passage — task 19B).

Student 1	Student 2
What can you advise me ... Is acetaminophen safe? What special instructions should I know about?	I can advise you ... All drugs have side effects, but ... Read and follow the instructions carefully. Pay special attention to dose. It is essential to avoid ...



#### IV. LABORATORY DIAGNOSTICS

##### Task 20.

**A.** Read the following text and say what medical specialties are mentioned in it.



An X-ray is a noninvasive medical test that helps physicians to diagnose and treat medical conditions. It is the oldest and most frequently used form of medical imaging. Imaging with X-ray involves exposing a part of the body to a small dose of ionizing radiation to produce pictures of the inside of the body. A bone X-ray makes images of any bone in the body, including the hand, wrist, arm, elbow, shoulder, spine, pelvis, hip, thigh, knee, leg, ankle or foot.

The technologist, an individual specially trained to perform radiology examinations, positions the patient on the X-ray table and places the X-ray film holder or digital recording plate under the table in the area of the body being imaged. A lead apron may be placed over the patient's pelvic area or breasts to protect from radiation. The patient must hold very still and may be asked to keep from breathing for a few seconds while the X-ray picture is taken to reduce the possibility of a blurred image. Two or three images (from different angles) will typically be taken. A bone X-ray examination is usually completed within five to ten minutes. When the examination is complete, the patient will be asked to wait until the radiologist determines that all the necessary images have been obtained. The radiologist will analyze the images and send a signed report to the physician, who will discuss the results with the patient.

**B.** Read the text again and find English equivalents for the following phrases:

- 1) безопасный (неинвазивный) тест
- 2) медицинское видеографическое изображение
- 3) защитить от радиации
- 4) задержать дыхание
- 5) получить изображение с помощью рентгена
- 6) снизить вероятность
- 7) нечеткое изображение
- 8) подписанное (специалистом) заключение

**C.** Complete the following questions and give answers to them.

1. Does X-ray help physicians to ... and ... medical conditions?

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2. Does X-ray involve a small or a large ...?
3. Why is a ... used during an X-ray?
4. Why must a patient hold very still while the ... is taken?
5. How many ... are typically taken?
6. How long does a bone X-ray ... last?

**D.** Describe the work of a technologist (begin with the phrases given below).

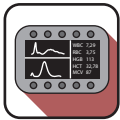
1. The technologist is ...
2. The technologist positions ...
3. He/She may place ...
4. He/She asks the patient ...

**E.** Pair work (Mini-role play) X-RAY

*Student 1 acts as a patient* and asks a technologist some questions about the procedure (use some questions in task 20C).

*Student 2 acts as a technologist* and answers the patient's questions (use the information in the text — task 20A).

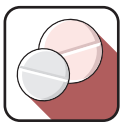
<b>Student 1</b>	<b>Student 2</b>
What can you tell me about the procedure? Is it safe? How long does it take?	An X-ray is ... Don't worry, it is ... It takes ... to complete a bone X-ray examination.



**V. CHECK YOUR PROGRESS**

Task 21. Group work (Mini-role play)

**SEMINAR: BONE FRACTURES**



Your class is attending a seminar devoted to the problems of treatment and prevention of bone fractures. Robert Stewart, a traumatologist from Yale School of Medicine, asks students questions about the types, diagnosis, symptoms, treatment and ways of prevention of bone fractures.



*Student 1 acts as a teacher* who has invited the specialist to the seminar.

*Introduction:* Welcome, everyone. Today we are going to look at one of the most common medical problems in the world — bone fractures. Our guest is ... He will ...

*Closing:* Our seminar is over. It was very useful and interesting. Thanks for participation.

*Student 2 acts as Robert Stewart, a specialist* who asks the students about the types of bone fractures, diagnosis, treatment

and ways of prevention of bone fractures (Use the information in task 9, 16, 19, 20)

*Students 3, 4, 5, ... act as seminar participants* and answer questions about the types, symptoms, diagnosis, treatment and ways of prevention of bone fractures (Use information in task 9, 19E, 20C).

<b>1. To ask questions use:</b>	<b>2. To answer questions use:</b>
Can you tell us about ... I'd like to ask you about ... My question is ... Could you please give us more details about ... What could you recommend ...?	I'll be glad to answer your questions. It is known that ... I'd like to stress ... It's important to remember that ... It's useful to know that ... I'd like to give some recommendations.