UNIT 7

THE HUMAN BODY

1. Try to answer the following questions.
Spróbuj odpowiedzieć na poniższe pytania.

1 What is anatomy?

2 What is physiology?

3 Why do massage and physical therapists need the knowledge of both in their line of work?

12 **2. Listen to the text and complete the sentences with the missing words. Then check your answers to the questions in exercise 1.**
Posłuchaj tekstu i uzupełnij go brakującymi słowami. Następnie sprawdź swoje odpowiedzi do pytań z ćwiczenia 1.

GLOSSARY

affect – wpływać
devise – obmyślić, zaprojektować
exact – dokładny, dokładnie
occur – pojawić się
utmost – największy, najwyższy
(of utmost importance – najwyższej wagi)

The body

Changes that occur in the body as a result of massage therapy directly influence _____. By working on one part of the body massage and physical therapists affect other parts. For this reason, knowing specific structures (organs, _____, bones) is of utmost importance in this line of work. To treat patients appropriately, therapists must not only know the exact location of these structures but also _____ how these structures function.

Human _____ is the scientific study of the body's structures and of the relationship between them.

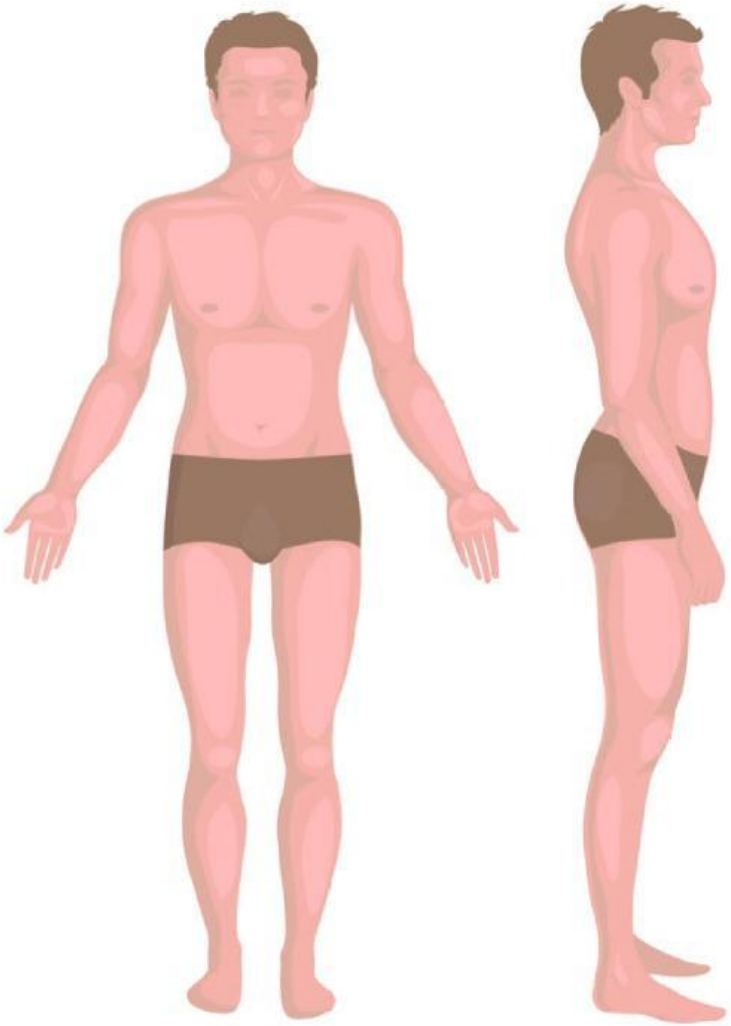
LIVEWORKSHEETS

Human _____ is the scientific study of the structures of the body and the ways in which they function.

To successfully treat _____, therapists need a good understanding of both. Knowledge of normal and pathological states helps therapists diagnose _____ and devise effective treatment plans.

3. Label as many parts of the body as you can in 3 minutes. When you finish, compare your picture with the pictures of other people from your group.

Podpisz tyle części ciała, ile zdołasz w 3 minuty. Kiedy skończysz, porównaj swój rysunek z rysunkami innych osób z grupy.



LIVEWORKSHEETS

4. Read the short text below and go back to the picture in exercise 3. Did you manage to label all the parts mentioned in the text? Look up the words you don't know in a dictionary.

Przeczytaj krótki tekst poniżej i wróć do rysunku z ćwiczenia 3. Czy udało ci się podpisać wszystkie części ciała wymienione w tekście? Poszukaj w słowniku słów, których znaczenia nie znasz.

The human body is divided into:

- the head (cranial and facial part),
- the neck,
- the trunk (the chest, the abdomen, the pelvis),
- the upper limbs (shoulder, arm, elbow, forearm, wrist, hand, fingers, thumb),
- the lower limbs (thigh, knee, shin, calf, ankle, foot, heel, toes).

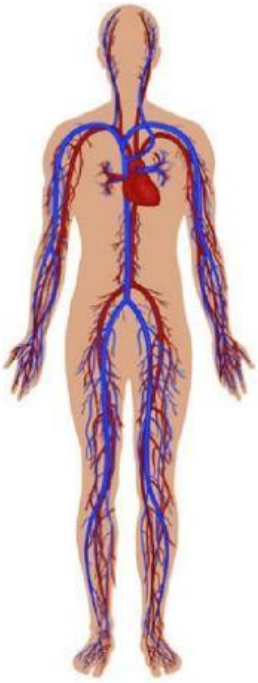
5. Match the English words with their Polish equivalents.

Dopasuj angielskie słowa do ich polskich odpowiedników.

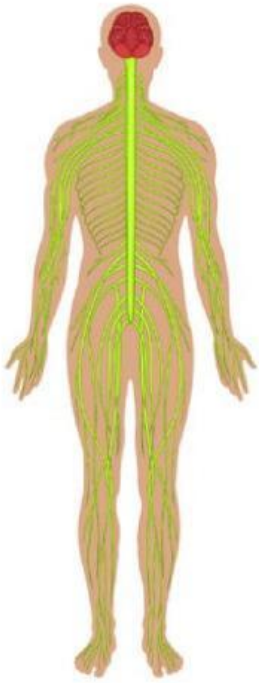
1	thigh	a	klatka piersiowa
2	chest	b	łokieć
3	calf	c	staw skokowy górny (pot. kostka)
4	toe	d	udo
5	wrist	e	łydka
6	elbow	f	nadgarstek
7	ankle	g	przedramię
8	forearm	h	palec u nogi

LIVEWORKSHEETS

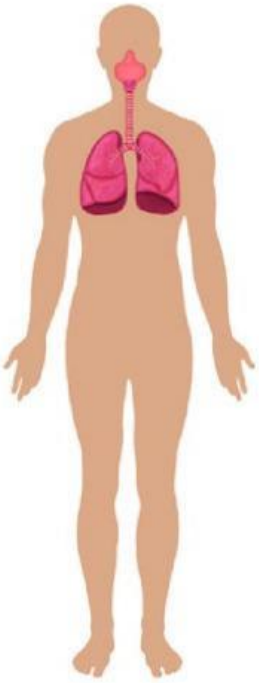
6. How many body systems can you name? Label the pictures.
Ile układów w ciele człowieka potrafisz nazwać? Podpisz rysunki.



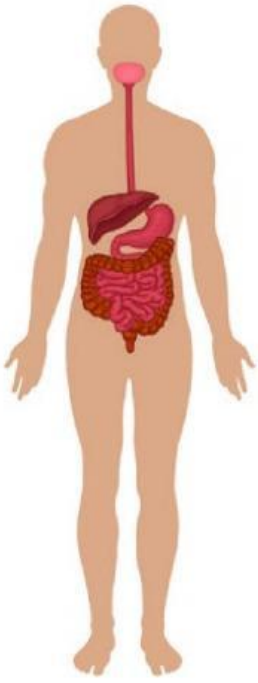
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LIVEWORKSHEETS

13 **7. Read the text and answer the following questions.**
Przeczytaj tekst i odpowiedz na poniższe pytania.

1 What is a body system?

2 What is homeostasis?

3 How is homeostasis maintained?

4 What may cause an imbalance of body systems?

GLOSSARY

carbon dioxide – dwutlenek węgla
cell – komórka
digestive system – układ pokarmowy, układ trawienny
endocrine system – układ dokrewny, hormonalny, wewnątrzwydzielniczy
excretory system – układ wydalniczy
integumentary – powłoka wspólna
internal – wewnętrzny
maintain – utrzymywać, zachowywać
oxygen – tlen
support – wspierać
sustain – doznawać, podtrzymywać
ultimately – ostatecznie
vital – podstawowy, życiowy

Systems of the human body

The human body is a perfectly engineered machine. Its many systems work together to **support** the body's **vital** functions and **maintain** homeostasis, i.e. optimal conditions and a stable **internal** environment for its **cells** and tissues.

A body system consists of a group of organs which work together to serve a common goal like breathing or reproduction. The function of a given system cannot be performed by any other system. If one system breaks down, the human body becomes unstable, which can **ultimately** result in death.

LIVEWORKSHEETS

If a person is under a lot of stress, in pain, has an increased body temperature, abnormal **oxygen** or **carbon dioxide** levels or **sustained** an injury, all of the systems work together to maintain homeostasis by adjusting metabolic processes.

There are 12 systems of the body:

1. skeletal
2. muscular
3. respiratory
4. cardiovascular
5. lymphatic
6. **digestive**
7. **excretory** (urinary)
8. reproductive
9. **endocrine**
10. nervous
11. sensory
12. **integumentary**

8. Translate the names of the body systems.

Przetłumacz nazwy układów w ciele człowieka.

1 układ szkieletowy – _____

2 układ mięśniowy – _____

3 układ krwionośny – _____

4 układ pokarmowy – _____

5 powłoka wspólna – _____

6 układ oddechowy – _____

7 układ wydalniczy – _____

8 układ rozrodczy – _____

9 układ nerwowy – _____

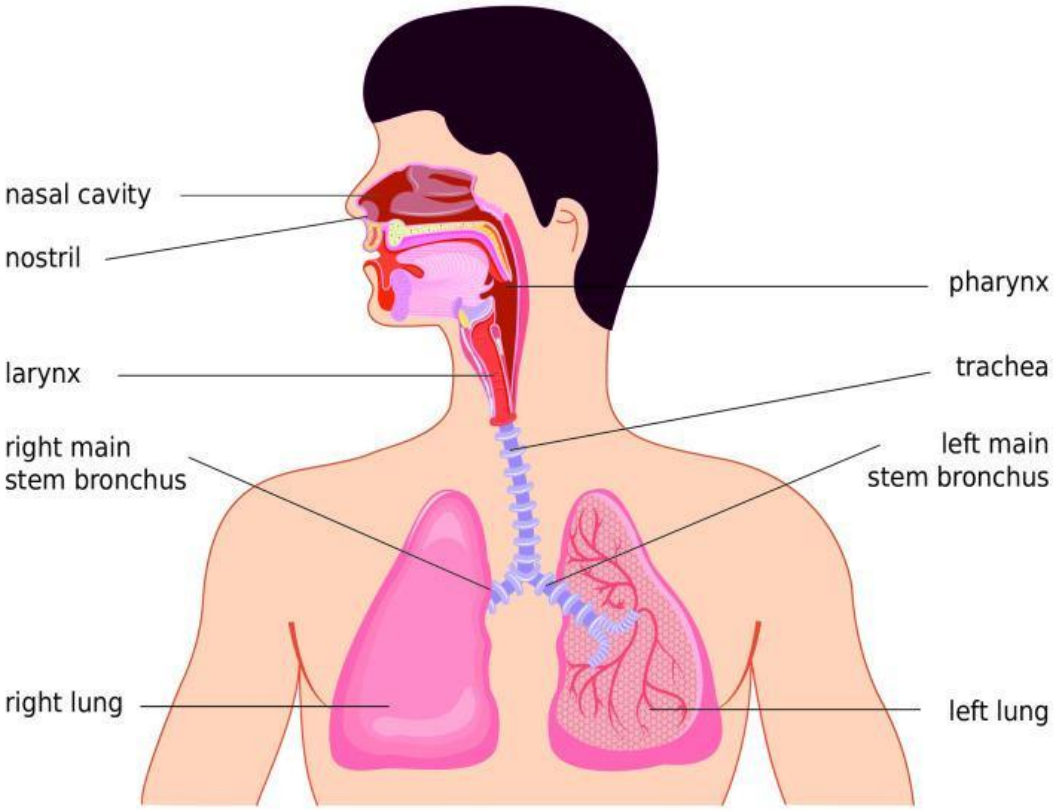
10 układ hormonalny – _____

LIVEWORKSHEETS

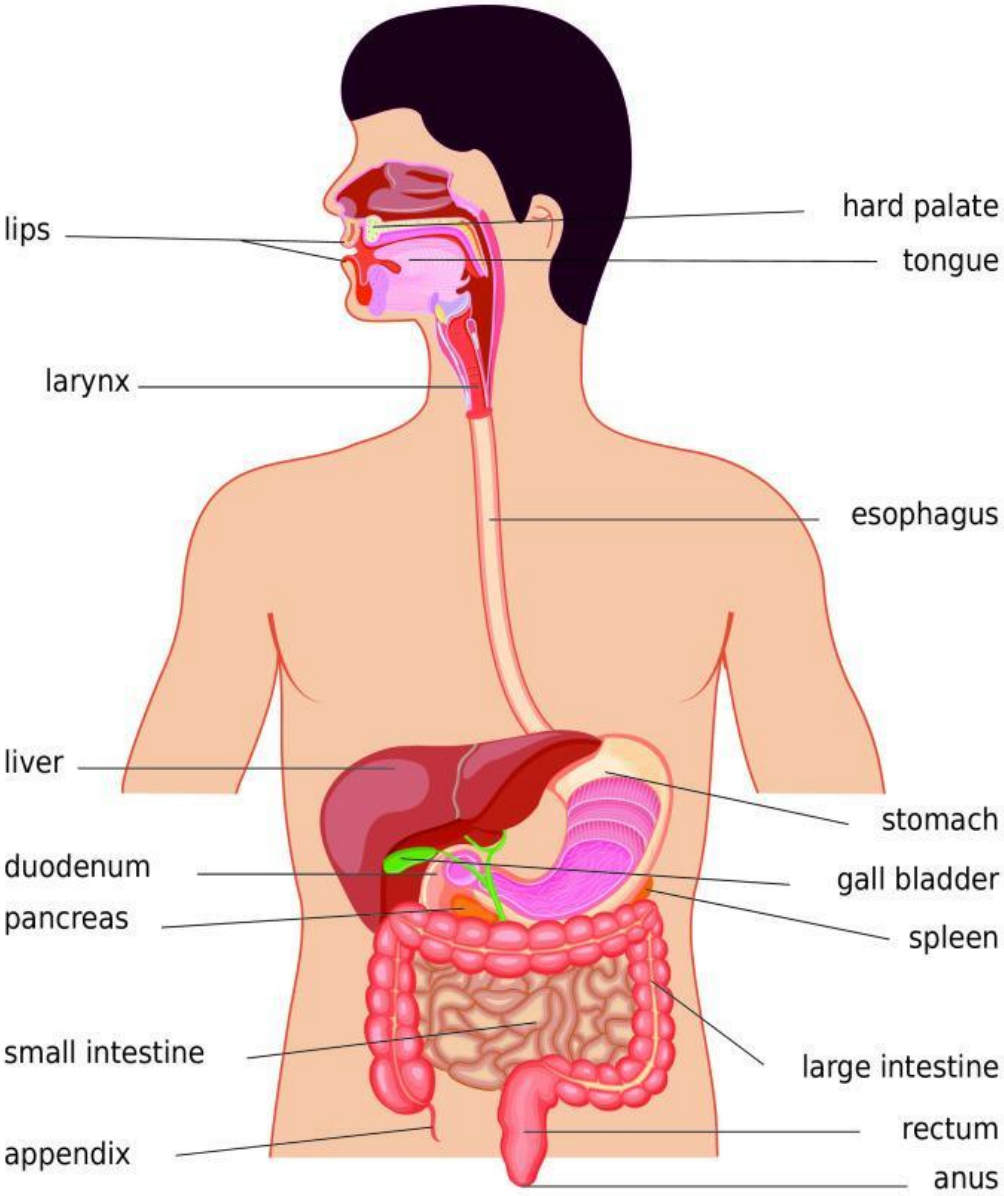
UNIT 8

BODY SYSTEMS

1. Translate the words in the pictures.
Which systems are shown in the pictures?
Przetłumacz słowa na rysunkach.
Które układy zostały na nich przedstawione?



LIVEWORKSHEETS



LIVEWORKSHEETS

2. Complete the table with the names of corresponding systems.
Uzupełnij tabelę nazwami odpowiednich układów.

ORGANS / PARTS	BODY SYSTEM
mouth, pharynx, esophagus, stomach, anus, small intestine, large intestine	
blood, heart, arteries, veins	
lymphatic vessels, lymph	
vagina, penis, ovaries, testes (testicles)	
lungs, nose, bronchi, trachea, larynx, pharynx	
bones, joints, cartilages	
kidneys, bladder	
glands, hormones	
brain, spinal cord, nerves, receptors	
skeletal muscles	

LIVEWORKSHEETS

3. Match the Polish words with their English equivalents.
Dopasuj polskie słowa do ich angielskich odpowiedników.

1	gardło	a	bronchi
2	jelito	b	trachea
3	naczynia krwionośne	c	gland
4	pęcherz moczowy	d	kidney
5	chrząstka	e	intestine
6	nerka	f	cartilage
7	tchawica	g	pharynx
8	gruczoł	h	bladder
9	rdzeń kręgowy	i	blood vessels
10	oskrzela	j	spinal cord

4. Read the text about the endocrine system and translate the words in bold. Try to guess their meaning from the context.
Przeczytaj tekst o układzie dokrewnym i przetłumacz pogrubione słowa. Spróbuj odgadnąć ich znaczenie z kontekstu.

The endocrine system is made up of glands that produce and release hormones into the **bloodstream**. Hormones are special substances which carry instructions telling particular body organs what to do. Some of the most important glands include the **pituitary gland** located at the base of the brain. The pituitary gland produces the growth hormone. **Adrenal glands** located on top of the kidneys produce adrenaline and the **thyroid gland** at the base of the neck produces hormones that control the metabolism, as well as ovaries in women and testes in men.

adrenal glands – _____

bloodstream – _____

pituitary gland – _____

thyroid gland – _____

LIVEWORKSHEETS

14 **5. Read the text about the cardiovascular system and decide whether the following statements are true (T) or false (F).**
Przeczytaj tekst o układzie krwionośnym i określ, czy poniższe stwierdzenia są prawdziwe (T) czy fałszywe (F).

1 Arterial blood is transported under low pressure.
2 The heart is a muscle the size of a closed fist.
3 Blood transported in capillaries is under lower pressure than in arteries.
4 Blood picks up oxygen in the lungs.
5 Capillaries are the thinnest blood vessels.
6 Arteries carry deoxygenated blood.
7 Oxygen-poor blood is darker than oxygen-rich blood.
8 The heart has six chambers.

GLOSSARY

atrium – przedsionek
capillary – naczynie włosowate
chamber – izba, komora
circuit – obieg
collect – zbierać
fist – pięść
moderate – średni, umiarkowany
nutrient – substancja odżywcza, składnik pokarmowy
pulmonary – płucny
thick – gęsty, gruby
ventricle – komora (serca lub mózgu)
waste – odpadowy, zbyteczny
withstand – wytrzymywać

The cardiovascular system

The cardiovascular system is the main transport system of the body. It is composed of the heart, blood vessels and blood. Blood is transported in blood vessels. The blood vessels of the body are a delivery system that begins and ends at the heart. The heart pumps blood via arteries, veins and **capillaries**. Blood circulates around the body in a closed **circuit**.

Arteries – with the exception of the **pulmonary** artery – carry oxygenated blood away from the heart and distribute it to all body tissues. Arteries have **thick** and elastic walls to **withstand** the pressure under which blood is carried.

LIVEWORKSHEETS

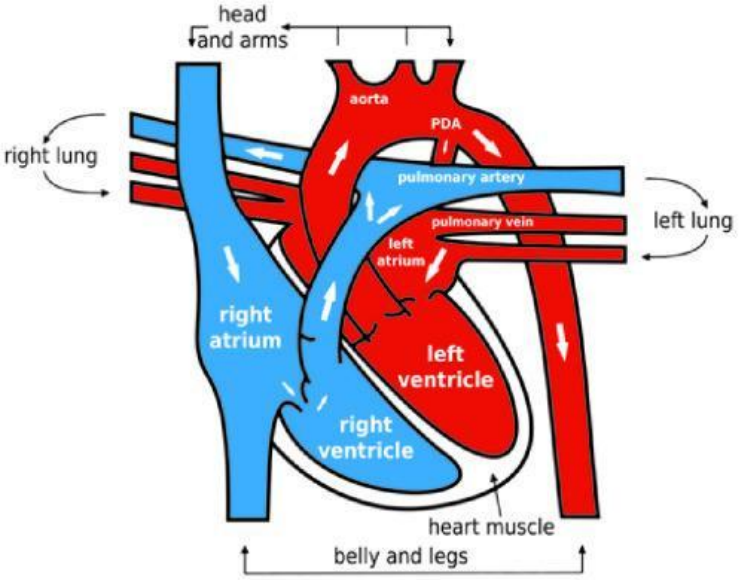
Capillaries are blood vessels that connect arteries and veins. Capillaries are the smallest vessels. Their thinness allows **nutrients**, oxygen and waste products to pass to and from cells. Blood is transported under **moderate** pressure in capillaries.

Veins – with the exception of the pulmonary veins – transport oxygen-poor blood back to the heart. Blood is transported under low pressure.

The heart is a muscle the size of a closed **fist**, consisting of four **chambers**: left and right **atriums** and left and right **ventricles**. By contracting and relaxing it acts as the body's circulatory pump. It collects deoxygenated blood from the veins and carries it to the lungs, where it picks up oxygen. When blood picks up oxygen, it is bright red. Blood gets its colour from haemoglobin, which transports oxygen. The oxygenated blood from the arteries travels through capillaries to every single tissue in the body. The heart pumps oxygenated blood to the tissues, which remove oxygen. On the way back to the heart, blood **collects waste** products, such as carbon dioxide. This is why the blood that flows in veins seems darker. Sometimes blood may appear to be blue, but it is merely the result of the way light penetrates the skin and illuminates veins.

6. Look at the picture and explain how the human cardiovascular system works.

Spójrz na zdjęcie i wytłumacz, jak działa układ krwionośny człowieka.



LIVEWORKSHEETS