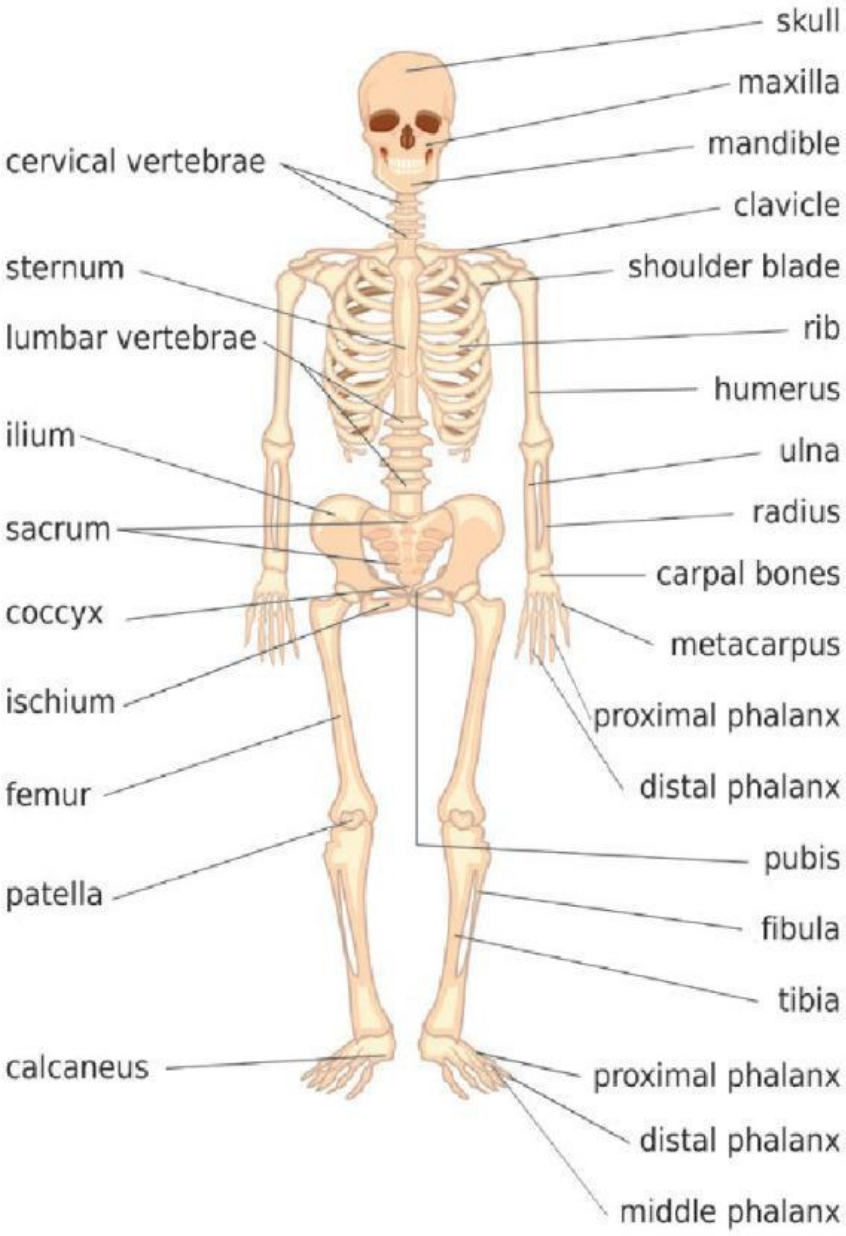
UNIT 9

THE SKELETON

1. Translate the names of the bones in the picture.
Przetłumacz nazwy kości na rysunku.



LIVEWORKSHEETS

2. Match the bones with the body parts.

Dopasuj kości do części ciała.

1	ribs	a	chest
2	maxilla	b	jaws, jawbones
3	ischium	c	forearm
4	cervical vertebrae	d	wrist
5	calcaneus	e	neck
6	sternum	f	the lower leg
7	radius	g	knee
8	tibia	h	thigh
9	patella	i	hip
10	ilium	j	heel
11	carpal bones		
12	ulna		
13	femur		
14	mandible		

3. Complete the sentences with the missing words.

Uzupełnij zdania brakującymi słowami.

sternum **patella** **clavicle** **calf** **hip** (x2)

1 Leg cramps which occur when you are asleep are usually sudden spasms of muscles in the _____.

2 _____ replacement is a surgical procedure in which the _____ joint is replaced by a prosthetic implant.

3 Kneecap is a more informal name of the _____ .

4 If you feel pain below the _____, it may be a result of some digestive problems.

5 _____ is the formal name of the collarbone.

LIVEWORKSHEETS

15 **4. Read the text and decide whether the following statements are true (T) or false (F).**

Przeczytaj tekst i określ, czy poniższe stwierdzenia są prawdziwe (T) czy fałszywe (F).

1 The skeleton consists of 80 bones.
2 There are 33–34 vertebrae.
3 The vertebral column has 3 regions.
4 The sacrum and coccyx are movable.
5 The thorax protects the heart and lungs.
6 The spine is the same thing as the vertebral column.
7 The vertebral column is straight.
8 There are 60 upper limb bones.
9 The cervical and lumbar regions of the spine are concave.
10 The vertebral column forms the central axis of the body.

GLOSSARY

appendicular – odnoszący się do kończyn
attach – połączyć, przymocować
axis – oś
bear – nieść, znosić
convex – wypukły
concave – wklęsły
curve – krzywizna, łuk
extremities – kończyny
ligament – więzadło
metatarsal bone – kość śródstopia
pelvic girdle – obręcz kończyny dolnej (miedniczna)
spinal cord – rdzeń kręgowy
tarsal bone – kość stępu
thorax – klatka piersiowa, tułów

The skeleton

The skeleton can be divided into two parts: the axial skeleton and the appendicular skeleton.

The axial skeleton

The axial skeleton forms the main (central) **axis** of the body. It consists of 80 bones. The axial skeleton includes: the skull, the vertebral column and the thorax.

- the skull

  The skull's primary function is to protect the brain.

LIVEWORKSHEETS

- the vertebral column (spine)

  The vertebral column forms the central axis of the body. It protects the **spinal cord** and provides a surface that muscles can **attach** to. The vertebral column consists of 33–34 vertebrae. The vertebrae are divided into the following regions: cervical, thoracic, lumbar, sacrum, coccyx. The vertebrae of the sacrum and coccyx are not movable. Cervical, thoracic and lumbar vertebrae are movable. **Ligaments** hold the vertebrae together and protect the intervertebral discs.

  There are four regions of the vertebral column:

  - cervical (neck) – supports the weight of the head; consists of 7 vertebrae,
  - thoracic (trunk) – holds the rib cage; protects the heart and lungs; consists of 12 vertebrae,
  - lumbar (low back) – **bears** the weight of the body; consists of 5 vertebrae,
  - sacral – connects the spine to the hip bones; consists of 5 vertebrae.

  The immovable coccyx provides attachment for ligaments and muscles. The coccyx consists of 3–4 vertebrae.

  The cervical and lumbar regions have a **concave curve**. The thoracic region has a **convex** curve.

- the **thorax**

  The thorax protects the heart and lungs.

The appendicular skeleton

The **appendicular** skeleton supports limbs (appendages) and keeps them attached to the rest of the body. It consists of 126 bones.

The appendicular skeleton includes bones of the shoulder girdle, upper **extremities**, the **pelvic girdle** and lower extremities.

- the shoulder girdle

  It connects the upper limbs with the thorax. It has four bones: two scapula (shoulder blade) and two clavicle (collarbone) bones.

- upper extremities

  There are 30 bones per each upper limb. They include: the humerus, the radius, the ulna, 8 carpals, 5 metacarpals and 14 phalanges.

- bones of the pelvic girdle

  The pelvic girdle consists of two hip bones. The hip bones consists of three fused bones: the ilium, the ischium and the pubis.

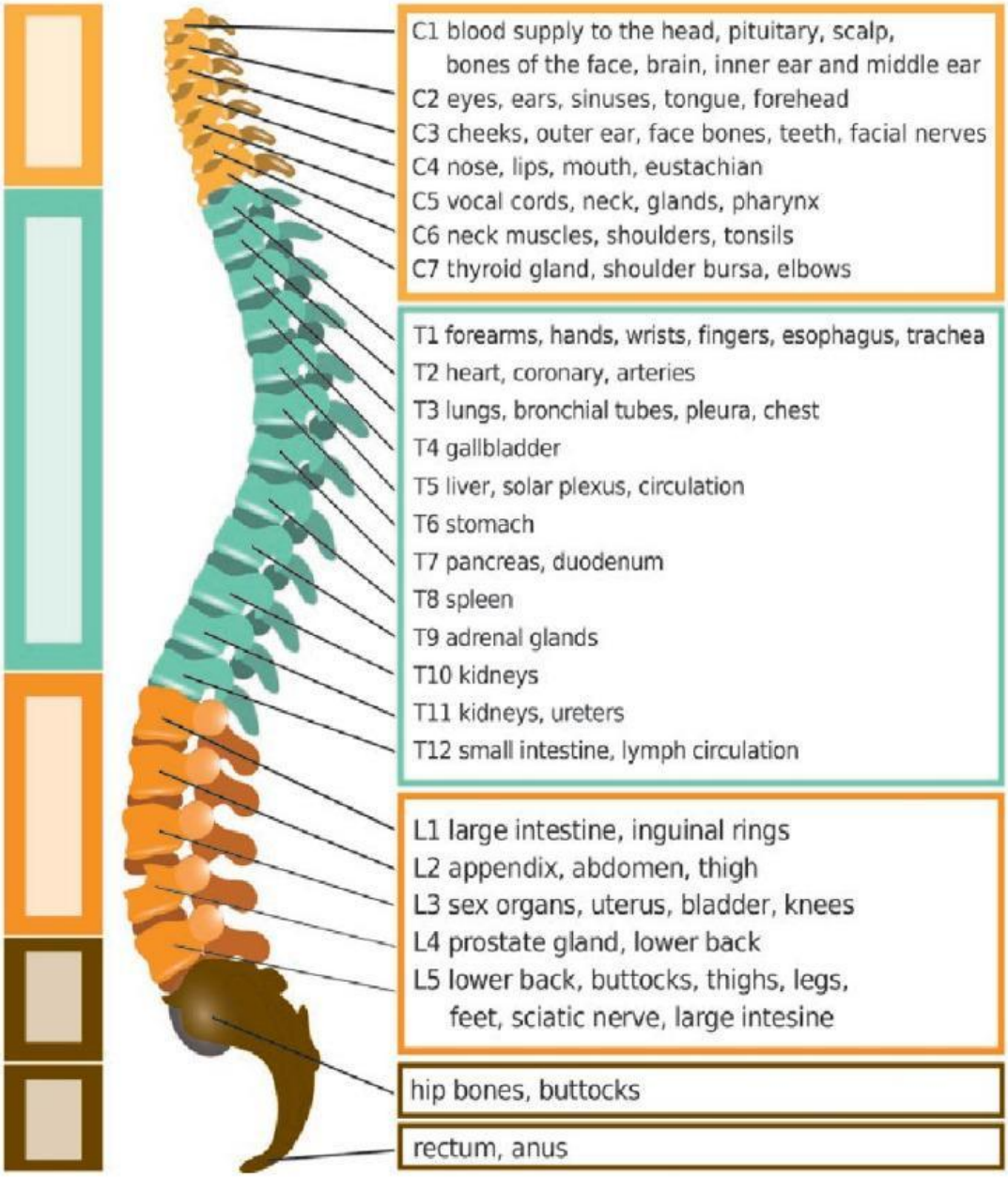
- lower extremities

  There are 30 bones per each lower limb. They include: the femur, the patella, the tibia, the fibula, 7 tarsals, 5 **metatarsals** and 14 phalanges.

LIVEWORKSHEETS

5. Label the parts of the vertebral column in the picture. Then write about their functions using the information in the picture and your knowledge of anatomy and physiology.

Podpisz odcinki kręgosłupa na rysunku. Następnie napisz o ich funkcjach, wykorzystując informacje z rysunku oraz swoją wiedzę z zakresu anatomii i fizjologii.



LIVEWORKSHEETS

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

1	wypukły	a	axial skeleton
2	wklęsły	b	spinal cord
3	szkielet osiowy	c	convex
4	kręgosłup szyjny	d	lumbar spine
5	kręgosłup lędźwiowy	e	cervical spine
6	rdzeń kręgowy	f	shoulder girdle
7	odcinek krzyżowy	g	sacral region (sacrum)
8	obręcz barkowa	h	concave

LIVEWORKSHEETS