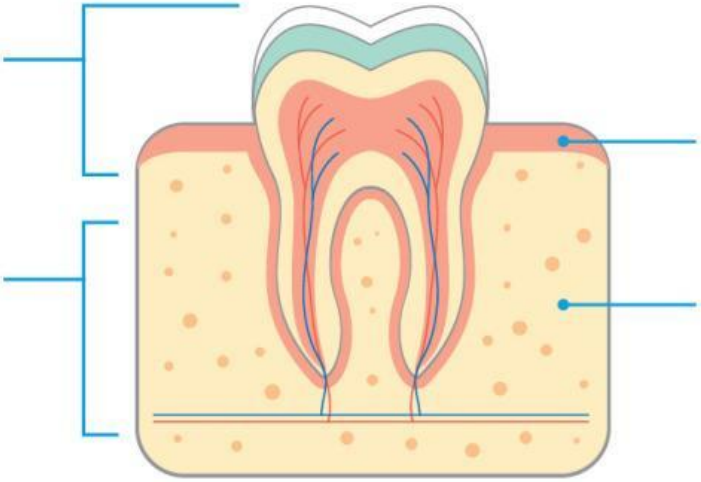
UNIT 6

TOOTH ANATOMY

1. Can you label the items marked in the picture?
Czy potrafisz podpisać elementy zaznaczone na rysunku?



11 **2. Read the text about teeth and answer the following questions.**
Przeczytaj tekst o zębach i odpowiedz na następujące pytania.

1 What is the neck of the tooth?

2 Which tissue is harder – dentine or enamel?

3 What is the role of the pulp?

4 When do people feel tooth pain?

5 Which tissue is translucent?

LIVEWORKSHEETS

GLOSSARY

apex – wierzchołek
apical foramen – otwór wierzchołkowy
attached (to sth) – połączony (z czymś), przymocowany
blood vessel – naczynie krwionośne
calcium phosphate – fosforan wapnia
cementoenamel junction – połączenie szkliwno-cementowe
cementum – cement
cervix – szyjka
dentine – zębina (Am. E. **dentin**)
dentinal tubule – kanalik zębinowy
dentinocemental junction – połączenie cementowo-zębinowe
dentinoenamel junction – połączenie szkliwno-zębinowe
enamel – szkliwo
layer – warstwa
ligament – więzadło
nourished – odżywiony
outer – zewnętrzny
periodontium – ozębna
prism – pryzmat
pulp – miazga zęba
pulp cavity – komora miazgi zęba
recede – cofać się
socket – zębodół
stimulus – bodziec, l.mn. **stimuli**
surface – powierzchnia
tissue – tkanka
translucent – (pół)przezroczysty

Tooth anatomy

A tooth is divided into two anatomical parts: the crown and the root.

Crown

The crown is the top part of a tooth. There are two types of crowns:

- clinical crown: the part of the tooth above the gumline which is visible when people open their mouth or smile. The length of the clinical crown changes over time and depends on the position of the gingiva (gums). When gums **recede**, the clinical crown becomes longer.
- anatomic crown: the part of the tooth covered with **enamel**. The length of the anatomic crown does not change during the life cycle of a tooth.

Root

The root of a tooth is the part of the tooth which is **attached to** the alveolar process (bone). The root is below the **cementoenamel junction (CEJ)** and is covered by the cementum. The end of the root is called an apex. The area surrounding the **apex** is the periapex. The CEJ (also referred to as the **cervix** or the neck of the tooth) is an area of the tooth where the cementum covering the root of a tooth and the enamel meet.

LIVEWORKSHEETS

Each tooth has four **tissues**:

Dentine

Dentine makes up most of the tooth. It is harder than bone but not as hard as enamel. Dentine is covered with enamel at the crown and with cementum at the root. Dentine consists of canals called **dentinal tubules**. Tubules run from the **dentinoenamel junction (DEJ)** in the crown area, or **dentinocemental junction (DCJ)** in the root area, to the outer wall of the pulp. Dentine plays an important role in transmitting pain.

Cementum

Cementum is a bone-like tissue that covers the **outer** surface of the root of the tooth. It joins the enamel at the CEJ. Cementum is a part of the **periodontium**. The periodontium supports teeth in the alveolar process in which teeth are embedded. The periodontium consists of gingiva, cementum, periodontal **ligaments** and the alveolar bone. Periodontal ligaments connect the cementum with the alveolar bone. They are responsible for holding the tooth in the **socket** in the alveolar process. Cementum is not as hard as dentine or enamel. It is not **translucent** – it does not allow light to pass through it. Cementum is lighter than dentine but darker than enamel.

Pulp

The pulp is a soft tissue inside the **pulp cavity** (the center of the tooth). **Blood vessels**, connective tissue and nerves enter the pulp through a canal called **apical foramen**. The nerves in the pulp transmit and receive **stimuli**. Pain is felt when, for example, tooth decay reaches the pulp. In addition, blood vessels of the pulp keep the tooth **nourished**.

Enamel

Enamel is the hardest material of the human body. It is mostly made of hydroxyapatite, which is a crystalline **calcium phosphate**. Enamel is the outer surface of the anatomic crown. This shiny **layer** plays an important role in preventing erosion and tooth decay. Enamel is translucent – it allows light to pass through it. Because of this enamel ranges in colour; it may be yellowish or greyish. Calcified **prisms** make up enamel. Prisms run from the **surface** of the tooth to the outer layer of dentine. The dentinoenamel junction (DEJ) is the area where enamel and dentine meet.

LIVEWORKSHEETS

3. Read the text again and decide whether the following statements are true (T) or false (F). Correct the false sentences.

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

1 The anatomic crown becomes longer during the life cycle of a tooth.

2 The root of a tooth is attached to the alveolar process.

3 The periapex is the end of the root.

4 Dentine is much harder than enamel.

5 Cementum consists of the periodontium.

6 Dentine is softer than cementum.

7 The nerves in the pulp transmit and receive stimuli.

8 Dentinal tubules keep the tooth nourished.

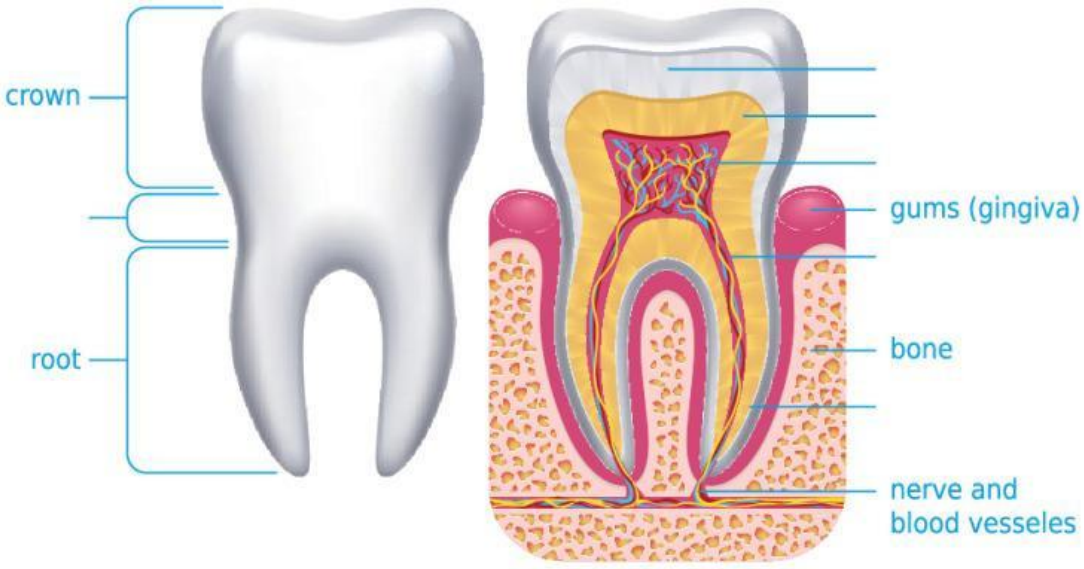
9 Enamel is the hardest material of the human body.

10 Enamel is not translucent.

4. Look at the picture of a tooth. Label the particular parts with suitable words.

Spójrz na rysunek zęba. Podpisz poszczególne elementy odpowiednimi słowami.

dentine **neck** **enamel** **root canal** **cementum** **pulp cavity**



LIVEWORKSHEETS

5. Match the English words with their Polish equivalents.

Dopasuj angielskie słowa do ich polskich odpowiedników.

1	anatomic crown	a	ozębna
2	pulp	b	szyjka
3	gingiva	c	przezroczysty
4	cervix	d	wyrostek zębodołowy
5	dentinal tubules	e	kanaliki zębinowe
6	periodontium	f	miazga
7	enamel	g	szkliwo
8	translucent	h	zębina
9	dentine	i	dziąsła
10	alveolar process	j	korona anatomiczna

6. Read the simpler description of the tooth anatomy. Complete the sentences with the missing words.

Przeczytaj prostszy opis budowy anatomicznej zęba.
Uzupełnij zdania brakującymi słowami.

1 The tooth has two anatomical _____. The crown of a tooth is that part of the tooth which is covered with _____ and this is the part usually visible in the mouth.

2 The root is the part embedded in the jaw. It keeps the tooth in its bony _____ and is normally not visible.

3 Enamel is the hard outer _____ of the crown. It is the hardest substance in the body.

4 Dentine is not as hard as enamel. It forms most of the tooth and can become sensitive if the protective _____ layer is lost.

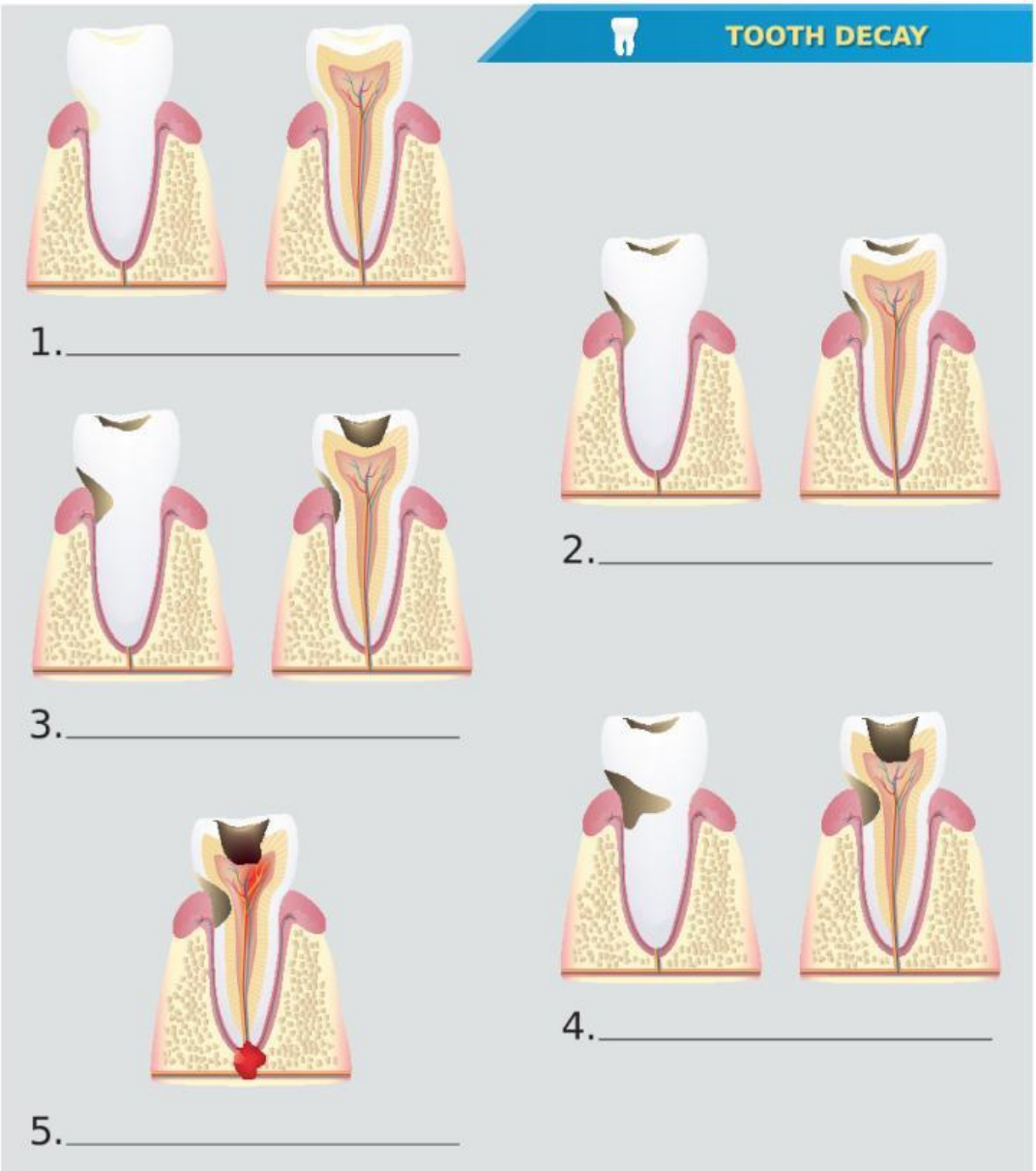
5 Pulp is the soft _____ containing the blood and nerve supply to the tooth. It extends from the crown to the end of the root.

6 Cementum is the layer of bone-like tissue covering the _____. It is not as hard as enamel.

LIVEWORKSHEETS

7. Match the stages of the tooth decay to the pictures.
Dopasuj etapy procesu próchnicowego do rysunków.

infected pulp **dental plaque** **pulp decay**
dentine decay **enamel decay**



LIVEWORKSHEETS