

DANYLO HALYTSKY LVIV NATIONAL MEDICAL UNIVERSITY  
DEPARTMENT OF LATIN AND FOREIGN LANGUAGES

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## **TERMS IN DENTAL PRACTICE**

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*Terms in Dental Practice* is designed for the students, postgraduate students, and health care professionals with the aim of meeting the requirement for improving the knowledge of English dental terms. The Guide primarily intends to fulfill the learning purposes of the students at Danylo Halytsky LNMU and can be incorporated within curriculum subjects in particular “English for professional purposes (Terms in Dental Practice)”, “Therapeutic dentistry” and other relevant disciplines.

*Terms in Dental Practice* covers all basic vocabulary of dental practice and includes explanatory notes and tasks to facilitate learning and encourage memorizing professional terminology.

## CONTENTS

### 1. Terms in Dental Practice (1)

1.1. Dental practice.....	4
1.2. Dental anatomy.....	4
1.3. Types of teeth.....	5
1.4. Common combining forms and abbreviations.....	5
1.5. Prevention of dental problems.....	6
1.6. Diagnostic procedures.....	6
Exercises.....	7

### 2. Terms in Dental Practice (2)

2.1. Dental restorations.....	17
2.2. Periodontal treatment.....	18
2.3. Orthodontics.....	18
2.4. Cosmetic dentistry.....	19
2.5. Common dental problems.....	19
2.6. Pharmacological terms.....	19
Exercises.....	20

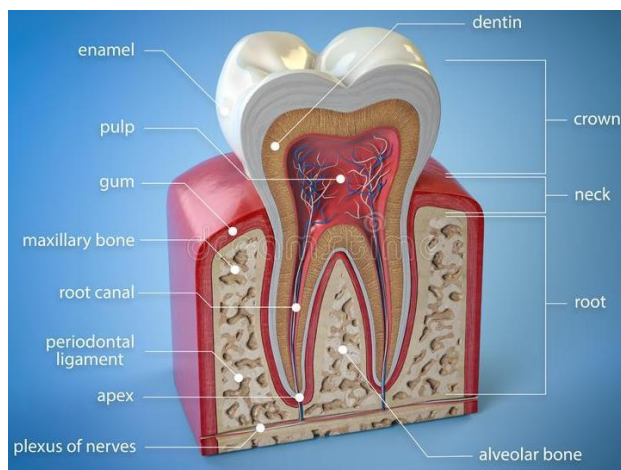
References.....	32
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### 1.1. Dental practice

**Dental practice** (*dentistry* or *odontology*) is the profession that studies, diagnoses, and treats the teeth and gums and any other parts of the oral cavity and facial structure that interact with teeth and gums. Dental practice includes prevention, diagnosis, and treatment, including both reconstructive and cosmetic surgery.

**Dentists** are trained practitioners generally assisted by *dental hygienists*, *dental assistants*, and *dental laboratory technicians*.

<b>Dental hygienists</b>	licensed health care professionals who have completed extensive educational and clinical preparation in preventive oral health care
<b>Dental assistants</b>	take x-rays, assist the dentist in providing treatment, and perform general office tasks
<b>Dental laboratory technicians</b>	work in the dental lab creating fixed or removable prosthetic devices such as crowns or bridges



The **oral cavity** is part of the digestive system. Teeth and gums help masticate or chew food at the beginning of the digestive process. They are also important to speech and general appearance. The **gums** or **gingivae** surround the bony **sockets** that hold the teeth in place. The gingivae are dense fibrous tissue that attach to and surround the necks of the teeth and adjacent alveolar bone of the jaw (upper jaw = **maxilla**, lower jaw = **mandible**) inside the oral cavity.

### 1.2. Dental anatomy

Each tooth has a **crown**, the part projecting above the jawline, and a **root**, the part below the jawline. The crown consists of an outer layer of glossy, hard, white **enamel**, and an inner layer of a hard bony substance called **dentin** surrounding the central portion of the tooth, the **pulp cavity**. The pulp cavity contains connective tissue, blood vessels, and nerves called the **pulp**, the life source of the tooth. The pulp extends down into the root of the tooth. **Root canals** are tubular structures that carry the blood vessels and nerves from the bottom of the jaw up into the pulp cavity. The root of the tooth is held in place by **cementum**, a bony material surrounding the root, and a *periodontal ligament*, fibrous material that connects the cementum to the jawbone.

In dental care, the **outer surfaces of teeth** are referred to in special terms:

<b>labial surface</b>	part of the tooth nearest the inner lip which meets with the lip when the mouth is closed
<b>buccal surface</b>	part of the tooth on the side of teeth nearest the cheek
<b>lingual surface</b>	the inside surface of tooth nearest the tongue
<b>mesial surface</b>	the short side of the tooth nearest the midline of the jawline
<b>distal surface</b>	the short side of the tooth farthest from the midline of the jawline

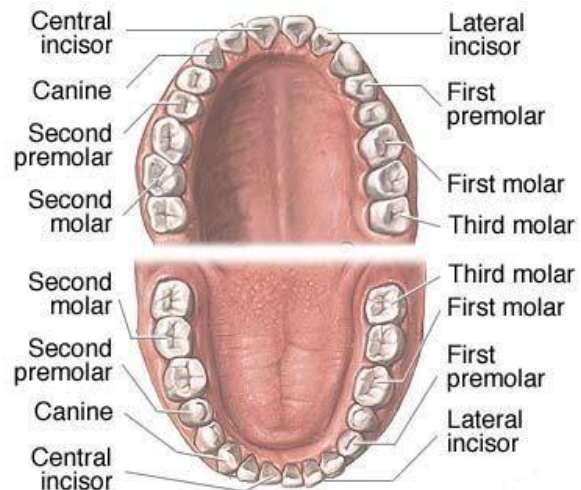
### 1.3. Types of teeth

Infants are born with no visible teeth but they usually have 20 primary teeth that have formed inside the gums. **Primary teeth** or **deciduous teeth** begin to erupt through the gum tissue at regular intervals at about six months. The twenty primary teeth, ten in the upper jaw and ten in the lower jaw, are usually all in place by age three.

**Pedodontists** are dentists who specialize in treating children. Early good dental hygiene can also affect the development of the hard palate and facial structure. Then, at about age six, the **secondary** or **permanent teeth** begin to develop and push the primary teeth out of their sockets at regular intervals. Ultimately, by as late as the mid-twenties, most people have gone through the teething process, and all thirty-two permanent teeth have developed. The body does not replace permanent teeth if they are lost.

The average human has **three types of primary** and **four types of secondary teeth**.

Primary teeth include incisors, cuspids, and molars. **Incisors** are the cutting teeth on either side of the centerline of the jaw. The **central incisors** are the teeth on either side of the centerline – two on top and two on the bottom. Next, are the **lateral incisors** or second incisors. The **cuspid** (=canine or **eyetooth**), a tooth with a sharp-pointed projection called a **cusp** sits next to the lateral incisor. There are three **molars** (=premolars). The **first molar** sits next to the cuspid, and the **second molar** sits at the back of a child's jaw.



The types of secondary teeth include incisors, cuspids, and molars, as well as **bicuspid**s. The secondary teeth also have central and lateral incisors, followed by one cuspid tooth. Next to each cuspid tooth is a **first bicuspid**, followed by a **second bicuspid**. Bicuspid are so named because they each have two cusps. Permanent teeth include a first, second, and **third molar** on each side of the jaw, both top and bottom. The third molar is popularly known as a *wisdom tooth* because it usually appears after a person is fully grown.

### 1.4. Common combining forms and abbreviations

COMBINING FORM	MEANING	EXAMPLE
<b>dent(o), denti</b>	tooth	<i>dentilabial</i> , relating to both teeth and lips
<b>gingiv(o)</b>	gum	<i>gingivitis</i> , inflammation of the gums
<b>odont(o)</b>	tooth	<i>odontorrhagia</i> , profuse bleeding after an extraction

ABBREVIATION	MEANING	ABBREVIATION	MEANING
<b>CDA</b>	certified dental assistant	<b>DMF</b>	decayed, missing, or filled (primary teeth)
<b>DDS</b>	doctor of dental surgery	<b>DMF</b>	decayed, missing, or filled (permanent teeth)
<b>DEF</b>	decayed, extracted, or filled (primary teeth)	<b>DEF</b>	decayed, extracted, or filled (permanent teeth)
<b>RDH</b>	registered dental hygienist	<b>TMJ</b>	temporomandibular joint

## 1.5. Prevention of dental problems

An ounce of prevention is worth a pound of cure

Most dental work begins with the prevention of tooth decay, **cavities**, or **caries**, **gradual decay** and **disintegration of teeth**, and **gingivitis** or **gum disease**. Preventive measures include:

**Brushing** teeth and gums twice daily to remove **plaque**, the sticky, colorless layer of bacteria that forms on the crowns and root surfaces of teeth causing tooth decay and periodontal (gum) disease

**Flossing** using a thin dental tape or string to clean between the teeth and under the gum line helps to remove plaque and food particles.

**Antimicrobial mouth rinses** and **toothpaste** reduce the bacterial count and inhibit bacterial activity in dental plaque.

**Fluoride mouth rinse** and **fluoride toothpaste** provide extra protection against tooth decay.

Applying **sealants\***

\*a plastic resin is applied to the depressions and grooves (pits and fissures) on chewing surfaces of molars and bicuspids. The sealant acts as a barrier, protecting enamel from plaque and acids.

## 1.6. Diagnostic procedures

Tooth decay in infants or toddlers can be caused by going to sleep with bottles in their mouths. As soon as a baby's first teeth appear – usually by age six months or so – the child is susceptible to decay. This condition is often referred to as **baby bottle tooth decay** or **early childhood caries**. In some unfortunate cases, infants and toddlers may experience severe tooth decay that requires **dental restorations** or **extractions**.

Once tooth decay (caries) has begun, the earlier it is caught the better the outcome. **Dental x-rays** reveal the beginnings of decay at and below the surface of the teeth. They can also reveal any problems with the normal growth of permanent teeth, such as an *impacted wisdom tooth* (=third molar) so tightly wedged into the jawbone that it is unable to erupt or break through the surface of the gums thoroughly.

**Dental cone beam computed tomography (CT)** is a special type of x-ray machine used in situations where regular dental or facial x-rays are not sufficient. This type of CT scanner generates 3-D images of **dental structures**, **soft tissues**, **nerve paths**, and **bone** in the **craniofacial region** in a single scan. It is commonly used for treatment planning of orthodontic issues.

**Dental cone beam CT** is also useful for more complex cases that involve:

- surgical planning for impacted teeth;
- diagnosing TMJ disorder;
- accurate placement of dental implants;
- evaluation of the jaw, sinuses, nerve canals and nasal cavity;
- detecting, measuring and treating jaw tumors;
- determining bone structure and tooth orientation;
- locating the origin of pain or pathology;
- cephalometric analysis;
- reconstructive surgery.



## EXERCISES

### Dental practice

#### Task 1. Choose proper terms to the definitions:

1. The profession that studies, diagnoses, and treats the teeth and gums and any other parts of the oral cavity as well as facial structures that interact with teeth and gums.
  - pedodontics
  - endodontics
  - dentistry
  - oral surgery
  - cosmetic dentistry
2. A profession that includes prevention, diagnosis, and treatment of oral conditions, including both reconstructive and cosmetic surgery.
  - surgery
  - dental practice
  - medicine
  - pediatrics
  - pharmacy
3. A trained practitioner generally assisted by dental hygienists, dental assistants, and dental laboratory technicians.
  - oculist
  - pharmacist
  - dental technician
  - dentist
  - cosmetic dentist
4. Licensed health care professionals who have completed extensive educational and clinical preparation in preventive oral health care
  - dentists
  - dental hygienists
  - oral surgeon
  - endodontists
  - periodontists
5. They take x-rays, assist the dentist in providing treatment, and perform general office tasks
  - dentists
  - dental assistants
  - radiologists
  - dental hygienists
  - oral surgeons
6. They work in the dental lab creating fixed or removable prosthetic devices such as crowns or bridges
  - dental laboratory technicians
  - dental assistants
  - radiologists
  - dentists
  - dental hygienists

7. A part of the digestive system, the space from the lips to the end of the hard palate
- pharynx
  - oral cavity
  - palate
  - mandible
  - maxilla
8. Dense fibrous tissue that attaches to and surrounds the necks of the teeth and adjacent alveolar bone of the jaw inside the oral cavity.
- palate
  - mandible
  - gingivae
  - maxilla
  - pharynx
9. Any of the hard white structures in the mouth used for biting food
- palate
  - mandible
  - maxilla
  - tooth
  - pharynx
10. It holds the tooth in place
- gingivae
  - palate
  - mandible
  - socket
  - maxilla
11. Either of the areas of flesh in the mouth to which the teeth are attached
- socket
  - palate
  - gum
  - mandible
  - maxilla
12. Either of the two bones at the bottom of the face that contain the teeth and move when you talk or eat
- socket
  - palate
  - jaw
  - parietal
  - temporal
13. Upper jaw
- mandible
  - palate
  - maxilla
  - jaw
  - TMJ



## Task 2. Fill in the blank spaces with proper words:

1. Odontology is the profession that studies, diagnoses, and treats the teeth and gums and any other parts of the oral cavity and \_\_\_\_\_ structures.

- buccal
- artificial
- facial
- glossal
- labial

2. Dental practice includes prevention, diagnosis, and treatment, including both \_\_\_\_\_ surgery.

- preventive and plastic
- reconstructive and cosmetic
- reconstructive and bypass
- oral and cardiovascular
- oral and bowel cavity

3. Dentists are trained practitioners generally assisted by \_\_\_\_\_, dental assistants, and dental laboratory technicians.

- radiologists
- dental hygienists
- oral surgeons
- periodontists
- security guys

4. Dental hygienists are licensed health care professionals who have completed extensive educational and clinical preparation in \_\_\_\_\_ oral health care

- reconstructive
- cosmetic
- plastic
- preventive
- cardiovascular

5. Dental assistants take \_\_\_\_\_, assist the dentist in providing treatment.

- pictures
- X-rays
- images
- care
- breaks

6. Dental laboratory technicians work in the dental lab creating fixed or removable prosthetic devices such as \_\_\_\_\_.

- crowns and implants
- crowns or bridges
- crowns and fillings
- fillings and veneers
- implants and veneers

7. \_\_\_\_\_ help masticate or chew food at the beginning of the digestive process.
- hard and soft palate
  - teeth and gums
  - lips and tongue
  - head and neck
  - hands and feet
8. The gingivae are \_\_\_\_\_ tissue that attach to and surround the necks of the teeth and adjacent alveolar bone of the jaw inside the oral cavity.
- epithelial
  - muscle
  - dense fibrous
  - cardiac
  - loose fibrous

## Common combining forms and abbreviations

### Task 3:

#### a) Provide the term for the definition:

1. Relating to teeth and lips
  - dental
  - dentilabial
  - labial
  - gingivolabial
  - glossal
2. Inflammation of the gums
  - stomatitis
  - periodontitis
  - halitosis
  - gingivitis
  - glossitis
3. Profuse bleeding after an extraction
  - diarrhea
  - salivation
  - hemorrhage
  - odontorrhagia
  - bleeding
  - logorrhea
4. Gingivectomy
  - incision in gingivae
  - removal of a tongue
  - removal of gums
  - plastic repair of the gingiva
  - removal of a tooth

#### b) Define the following abbreviations:

5. DEF
  - decayed, extracted, or filled (permanent teeth)
  - decayed, extracted, or filled (primary teeth)
  - decayed, extracted, or filled (molar)
  - decayed, extracted, or filled (premolar)
  - decayed, extracted, or filled (incisor)
6. TMJ
  - temporal mandibular joint
  - temporomandibular joint
  - trained medical journalist
  - temporomandibular jaw
  - tomato and mandarin jam
7. DMF
  - decayed, missing, or filled (primary teeth)
  - decayed, extracted, or filled (molar)
  - decayed, extracted, or filled (premolar)
  - decayed, missing, or filled (permanent teeth)
  - decayed, extracted, or filled (incisor)

## Dental anatomy

### Task 4. Fill in the blank spaces with proper words:

1. Each tooth has a \_\_\_\_\_, the part projecting above the jawline.
  - enamel
  - dentin
  - crown
  - pulp cavity
  - cementum
2. Each tooth has a \_\_\_\_\_, the part below the jawline.
  - enamel
  - dentin
  - root
  - pulp cavity
  - cementum
3. The crown consists of an outer layer of glossy, hard, white \_\_\_\_\_.
  - root
  - dentin
  - pulp cavity
  - enamel
  - cementum
4. The crown consists of an inner layer of a hard bony substance called \_\_\_\_\_ surrounding the pulp cavity.
  - root
  - enamel
  - pulp cavity
  - dentin
  - cementum
5. The \_\_\_\_\_ contains connective tissue, blood vessels, and nerves called the pulp.
  - root
  - pulp cavity
  - enamel
  - dentin
  - cementum
6. The pulp extends down into the \_\_\_\_\_ of the tooth.
  - enamel
  - root
  - dentin
  - pulp cavity
  - cementum
7. Root canals are tubular structures that carry the blood vessels and nerves from the bottom of the jaw up into the \_\_\_\_\_.
  - root
  - enamel
  - pulp cavity
  - dentin
  - cementum

8. The root of the tooth is held in place by\_\_\_\_\_.
- root
  - enamel
  - dentin
  - cementum
  - pulp cavity
9. Cementum is a \_\_\_\_\_ material surrounding the root, and a periodontal ligament.
- fibrous
  - muscular
  - connective
  - bony
  - loose

**Task 5. Choose a proper term to the definition:**

1. The hard white outer layer of a tooth
- pulp
  - root
  - dentin
  - enamel
  - cementum
2. A part of the tooth nearest the inner lip that meets with the lip when the mouth is closed
- buccal surface
  - lingual surface
  - labial surface
  - mesial surface
  - distal surface
3. A part of the tooth on the side of teeth nearest the cheek
- lingual surface
  - buccal surface
  - labial surface
  - mesial surface
  - distal surface
4. The inside surface of the tooth nearest the tongue
- distal surface
  - lingual surface
  - labial surface
  - buccal surface
  - mesial surface
5. The short side of the tooth nearest the midline of the jawline
- distal surface
  - labial surface
  - buccal surface
  - mesial surface
  - lingual surface

6. The short side of the tooth farthest from the midline of the jawline
- mesial surface
  - distal surface
  - labial surface
  - buccal surface
  - lingual surface

**Task 6. Match the definitions with correct terms:**

1. Tooth disease
- odontology
  - odontalgia
  - gingivitis
  - odontopathy
  - periodontitis
2. Tooth-shaped
- vermiform
  - dentiform
  - cone-shaped
  - teething
  - pear-shaped
3. Dentistry
- periodontology
  - pedodontics
  - endodontics
  - odontology
  - dentalgia
  - dentist
4. Toothache
- pathology
  - myalgia
  - odontopathy
  - adenopathy
5. Surgical resection of the gums
- gingivotomy
  - gingivitis
  - gingival
  - gingivectomy
  - dentalgia
6. Inflammation of gums and deeper periodontal structures
- glossitis
  - gingivitis
  - dentalgia
  - periodontitis
  - stomatitis

## Types of teeth

### Task 7. Choose a proper synonym to the word:

1	dentistry	a	permanent tooth
2	mouth	b	cuspid
3	gums	c	dental practitioner
4	primary tooth	d	mandible
5	secondary tooth	e	oral cavity
6	pedodontist	f	maxilla
7	canine	g	deciduous tooth
8	dentist	h	odontology
9	upper jaw	i	pediatric dentist
10	lower jaw	j	gingivae

### Task 8. Circle T for *true* or F for *false*:

1. Wisdom teeth are only secondary teeth. T F
2. The pulp of a tooth is the gum. T F
3. Primary teeth erupt through the gums all at once. T F
4. The outer layer of a tooth is the enamel. T F
5. The buccal surface is the side nearest the lip. T F

### Task 9. Fill in the blank spaces with proper words:

1. Primary teeth or \_\_\_\_\_ begin to erupt through the gum tissue at about six months.
  - permanent teeth
  - cuspids
  - deciduous teeth
  - deciding teeth
2. \_\_\_\_\_ are dentists who specialize in treating children.
  - dentists
  - endodontists
  - pedodontists
  - oral surgeons
3. At about age six, the secondary or \_\_\_\_\_ begin to develop.
  - lifelong teeth
  - cuspids
  - permanent teeth
  - constant teeth
4. \_\_\_\_\_ are the cutting teeth on either side of the centerline of the jaw.
  - cuspids
  - incisors
  - molars
  - premolars
5. The \_\_\_\_\_, a tooth with a sharp-pointed projection sits next to the lateral incisor.
  - cuspid
  - molar
  - premolar
  - incisor

## Prevention and diagnosis of dental problems

### Task 10. Match the definitions with correct terms:

1. The act of stopping something bad from happening
  - treatment
  - diagnosing
  - prevention
  - grading
  - evaluation
2. Act of removing or trying to remove something from a place or surface with a brush
  - cleaning
  - brushing
  - flossing
  - drilling
  - irrigating
3. A soft substance that forms on teeth and encourages the growth of harmful bacteria
  - calculus
  - decay
  - plaque
  - caries
  - dust
4. Cleaning between your teeth with dental floss
  - brushing
  - cleaning
  - flossing
  - drilling
  - irrigating
5. A plastic resin applied to the depressions and grooves on chewing surfaces of molars.
  - filling
  - veneer
  - sealant
  - bridge
  - crown
6. A special type of x-ray machine generating 3-D images used in situations where regular dental or facial x-rays are not sufficient
  - MRI
  - dental cone beam computed tomography
  - X-ray generator
  - X-ray detector
  - radiograph
7. A disorder where the third molars are prevented from erupting into the mouth
  - unerupted wisdom teeth
  - impacted wisdom teeth
  - erupted wisdom teeth
  - exposed wisdom teeth
  - filled wisdom teeth

**Task 11. Write the letter of the answer in the space provided:**

- |   |                   |
|---|-------------------|
| 1. ___ number of primary teeth            | a. lingual        |
| 2. ___ number of secondary teeth          | b. near the cheek |
| 3. ___ buccal                             | c. near the lip   |
| 4. ___ near the tongue                    | d. mesial         |
| 5. ___ labial                             | e. 32             |
| 6. ___ nearest the midline of the jawline | f. 20             |

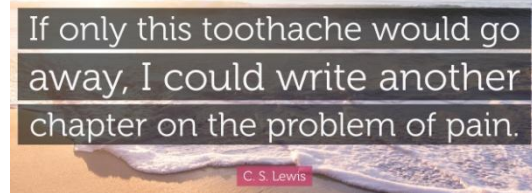
**Task 12. Fill in the blank spaces with proper words:**

- It is recommended to brush teeth and gums twice daily to remove \_\_\_\_\_.
  - calculus
  - caries
  - fillings
  - plaque
  - dentures
- \_\_\_\_\_ between the teeth and under the gum line helps to remove plaque and food particles.
  - rinsing
  - flossing
  - brushing
  - filling
  - drilling
- Using \_\_\_\_\_ reduces the bacterial count and inhibits bacterial activity in dental plaque.
  - dental floss
  - antimicrobial mouth rinse
  - fluoride mouth rinse
  - fluoride toothpaste
  - interdental brushes
- Using fluoride toothpaste provides extra protection against tooth \_\_\_\_\_.
  - plaque
  - calculus
  - decay
  - caries
  - fillings
- Tooth decay in infants can be \_\_\_\_\_ by going to sleep with bottles in their mouth.
  - prevented
  - recommended
  - stopped
  - caused
  - treated
- Dental \_\_\_\_\_ reveal the beginnings of decay at and below the surface of the teeth.
  - CT scan
  - MRI
  - hygienists
  - x-rays
  - assistants



## 2.1. Dental restorations

Tooth decay can cause **toothaches** (=odontalgia). Early tooth decay that has not invaded the central portion of the tooth usually receives a **filling**, which includes: drilling, cutting away some of the tooth structure, removing the decayed area, and placing medication and restoration material into space.



There are several **dental filling** options:

Dental <b>amalgam</b> is a mixture of metal alloys. It is durable, easy to use, highly resistant to wear, and relatively inexpensive in comparison to other materials.
<b>Composite fillings</b> are a mixture of glass or quartz filler in a resin medium that produces a tooth-colored filling.
<b>Glass ionomers</b> are translucent, tooth-colored materials made of a mixture of acrylic acids and fine glass powders that are used to fill cavities, particularly on the root surfaces of teeth.
<b>All-porcelain (ceramic)</b> dental materials include <i>porcelain</i> , <i>ceramic</i> or <i>glasslike fillings</i> , <i>crowns</i> , or <i>veneers</i> .
<b>Porcelain-fused-to-metal</b> provides strength to a crown or bridge. These restorations are very strong and durable.
<b>Gold alloys</b> contain gold, copper, and other metals that result in a strong, effective filling, crown, or bridge.

If decay is deeper within the tooth, affecting the nerve tissue, an **abscess**, infection and swelling of the soft tissue of the jaw, may result. In some cases, the tooth must be removed partially or totally. If nerve tissue must be removed, **root canal work** is performed. *Root canal work* is the removal of pulp tissue and affected nerves in the root canals. Medication is applied and the affected canals are **sealed off**. **Endodontists** are dentists who specialize in root canal work.

When teeth are damaged by severe trauma or decayed to the extent that they cannot be restored, **replacement or artificial teeth** are used. **Prosthodontics** deals with the construction of artificial devices for replacing missing teeth or other structures in the mouth and jaw. The **prosthodontist** specializes in the practice of prosthodontics.

<b>Dentures</b> are dental prostheses that can be permanently held in place or can be removable. They are either <i>partial</i> , replacing one or more but not all teeth, or <i>full</i> , replacing a whole set of teeth.
A <b>bridge</b> is a restoration that replaces or spans the space where one or more teeth have been lost. There are two types of bridges, <i>fixed</i> bridges (bonded into place and can only be removed by the dentist), and <i>removable</i> bridges (can be taken out for cleaning).
Missing teeth may also be replaced with dental <b>implants</b> , artificial teeth that have extensions set into bone. Implants are expensive and, while some people will have an entire mouth filled with implants, they are more commonly used for just a few teeth.

Dentists use a process of **impressions, molding, shaping, and color-matching substances** that are then made into dentures or bridges in a dental laboratory before being placed into the patient's mouth.

## 2.2. Periodontal treatment

**Gum disease (periodontal disease)** is classified according to the severity of the disease. The two major stages are *gingivitis* and *periodontitis*. **Gingivitis** is a milder and reversible form of periodontal disease that only affects the gums. Gingivitis may lead to more serious, destructive forms of periodontal disease called **periodontitis**. Gingivitis and periodontitis can result from too much **plaque**, other medical conditions, or general **poor dental hygiene** and health. **Periodontists** are specialists who treat gum disease, often by surgically removing diseased tissue and calcified plaque in a process called scaling.

Common **signs and symptoms of periodontal disease** include:

- Gums that bleed easily
- Red, swollen, tender gums
- Gums that have pulled away from the teeth
- Persistent **bad breath** or **bad taste**
- **Loose** or **separating** permanent teeth
- Any change in the way your teeth fit together when you bite or in the fit of partial dentures

It is possible to have periodontal disease and have no **warning signs**. That is one reason why regular **dental checkups** and **periodontal examinations** are very important. **Good oral hygiene** is essential to help keep periodontal disease from becoming more serious or **recurring**.

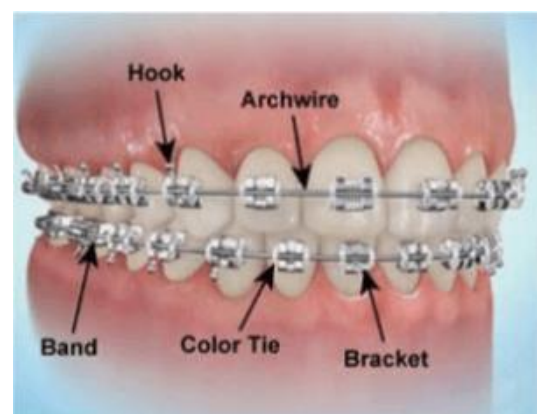


## 2.3. Orthodontics

*Orthodontists* are dentists who specialize in **orthodontics**, the correction, and prevention of irregularities in the alignment and appearance of teeth. They can correct **malocclusions**, abnormal closure of the top teeth in relation to the bottom teeth, such as an overbite.

Malocclusions may be corrected with surgical removal of any teeth that are crowding other teeth or with **braces**, appliances that put pressure on the teeth to move them slowly into place.

Some dentists also treat **temporomandibular joint (TMJ) dysfunction**, pain in the jawline due to dislocation or joint problems that prevent this complex system of muscles, ligaments, discs, and bones from working together properly. Treatments for this pain may include **stress-reducing exercises**, **muscle relaxants**, or wearing a **mouth protector** to prevent *teeth grinding* (**bruxism**).



## 2.4. Cosmetic dentistry

Some dentists perform cosmetic dentistry by replacing and manipulating *broken, discolored, or disfigured teeth*. Others treat discolored teeth with bleaching products to whiten them. Most dental stains are caused by age, tobacco, coffee, or tea, antibiotics, such as tetracycline, or **excess fluoride**.

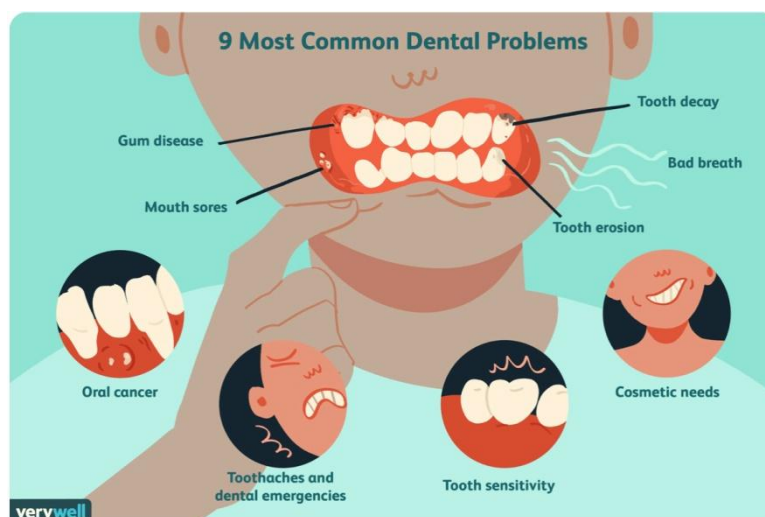
Cosmetic treatment may include:

<b>Bleaching</b>	<i>Chairside bleaching</i> involves several sessions. A bleaching agent is applied to the teeth, and a special light may be used to enhance the action of the agent. At-home bleaching may involve the use of <i>mouth trays</i> and a <i>peroxide-containing gel</i> .
<b>Bonding</b>	Composite resin is molded onto the teeth to change their color and to reshape them.
<b>Porcelain veneers</b>	Shell-like facings can be bonded onto stained teeth
<b>Whitening toothpaste</b>	Some whitening kinds of toothpaste effectively keep the teeth cleaner and, therefore, looking whiter, but some are rather abrasive.

## 2.5. Common dental problems

The most common dental problems include\*:

1. Bad breath (=halitosis)
2. Tooth decay (=dental caries, dental cavities)
3. Gum (periodontal) disease
4. Oral cancer
5. Mouth sores
  - Canker sores or aphthous ulcers
  - Fever blisters or cold sores
  - Thrush or candidiasis
6. Tooth erosion
7. Tooth sensitivity
8. Toothaches and dental emergencies
9. Unattractive smile



\*Adapted from: *The most common dental problems include*. Available at: <https://www.verywellhealth.com/top-common-dental-problems-1059461>

## 2.6. Pharmacological terms

Dentists provide local anesthetics during certain treatments, such as drilling. The most commonly used are:

<b>Novocain</b>	which is injected near the site being treated
<b>Nitrous oxide</b>	a gas inhaled by the patient, also known as <i>laughing gas</i> because it produces laughing in some patients.
<b>Antibiotics or Painkillers/analgesics</b>	after a dental procedure if there is a need. However, there are limitations to the number and strengths they can prescribe.

## EXERCISES

### Dental restorations

#### Task 1. Choose proper terms to the definitions:

1. A process that includes: drilling, cutting away some of the tooth structure, removing the decayed area, and placing medication and restoration material into space.
  - implanting
  - restoration
  - filling
  - repair
  - bleaching
2. A dentist who specializes in root canal work
  - periodontist
  - orthodontist
  - pedodontist
  - endodontist
  - oral surgeon
3. Specialty dealing with the construction of artificial devices for replacing missing teeth.
  - endodontics
  - periodontology
  - prosthodontics
  - pedodontics
  - oral surgery
4. Dental prostheses that can be permanently held in place or can be removable.
  - filling
  - implant
  - denture
  - sealant
  - veneer
5. A restoration that replaces or spans the space where one or more teeth have been lost.
  - denture
  - filling
  - bridge
  - implant
  - sealant
6. Artificial teeth that have extensions set into bone.
  - implant
  - denture
  - bridge
  - filling
  - sealant
7. A mark that is left when an object is pressed hard into a surface of a tooth
  - mark
  - impression
  - molding
  - bleaching
  - filling

## Task 2. Match the beginnings and the endings of the sentences:

<b>Dental amalgam</b>	include <i>porcelain, ceramic</i> or <i>glasslike fillings, crowns, or veneers</i> .
<b>Composite fillings</b>	provides strength to a crown or bridge. These restorations are very strong and durable.
<b>Glass ionomers</b>	contain gold, copper, and other metals that result in a strong, effective filling, crown, or bridge.
<b>All-porcelain dental materials</b>	are a mixture of glass or quartz filler in a resin medium that produces a tooth-colored filling.
<b>Porcelain-fused-to-metal</b>	is a mixture of metal alloys. It is durable, easy to use, highly resistant to wear, and relatively inexpensive in comparison to other materials.
<b>Gold alloys</b>	are translucent, tooth-colored materials made of a mixture of acrylic acids and fine glass powders.

## Task 3. Fill in the blanks with proper words:

1. Deep tooth decay affecting the nerve tissue may result in an infection or \_\_\_\_\_.

- caries
- abscess
- cavity
- plague
- calculus

2. \_\_\_\_\_ teeth are used when teeth cannot be restored.

- porcelain
- artificial
- natural
- healthy
- new

3. \_\_\_\_\_ dentures replace one or more but not all teeth.

- full
- fixed
- partial
- removable
- movable

4. \_\_\_\_\_ dentures replace a whole set of teeth.

- partial
- fixed
- full
- removable
- movable

5. \_\_\_\_\_ bridges are bonded into place and can only be removed by the dentist.

- partial
- fixed
- full
- removable
- movable

6. \_\_\_\_\_ bridges can be taken out for cleaning.

- fixed
- removable
- partial
- full
- attached

7. \_\_\_\_\_ deals with the construction of artificial devices for replacing missing structures in the mouth and jaw.

- endodontics
- periodontology
- pedodontics
- prosthodontics
- oral surgery

8. The \_\_\_\_\_ specializes in the practice of construction of artificial dental devices.

- orthodontist
- prosthodontist
- endodontist
- periodontist
- pedodontist



## Periodontal treatment

### Task 4. Fill in the blanks with proper words:

- Gingivitis is a milder form of \_\_\_\_\_ disease that only affects the gums.
  - gingival
  - tooth
  - periodontal
  - dental
  - oral
- Gingivitis and periodontitis can result from too much \_\_\_\_\_.
  - calculus
  - crown
  - teeth
  - plaque
  - hygiene
- Gingivitis and periodontitis can result from \_\_\_\_\_ dental hygiene.
  - rich
  - proper
  - sufficient
  - poor
  - terrific
- A periodontal exam involves taking six measurements around each \_\_\_\_\_ to measure the depth of the space between the tooth and gums.
  - gum
  - root
  - tooth
  - crown
  - denture
- \_\_\_\_\_ oral hygiene is essential to help keep periodontal disease from becoming more serious.
  - bad
  - improper
  - balanced
  - good
  - poor
- Proper oral hygiene is essential to help keep periodontal disease from \_\_\_\_\_.
  - returning
  - coming back
  - recurring
  - coming again
  - coming soon
- The goal of periodontal treatment is to clean thoroughly the \_\_\_\_\_ around teeth.
  - pockets
  - pits
  - cavities
  - sockets
  - fissures
- \_\_\_\_\_ removes tartar and bacteria from the tooth surfaces and beneath your gums.
  - bleaching
  - filling
  - removing
  - scaling
  - drilling
- Dental \_\_\_\_\_ refers to the practice of keeping the mouth, teeth, and gums clean and healthy to prevent disease.
  - health
  - treatment
  - hygiene
  - care
  - restorations
- \_\_\_\_\_ is an infection caused by bacteria that destroy the gums and bone.
  - gingivitis
  - periodontal disease
  - stomatitis
  - glossitis
  - caries
- Proper tooth brushing is critically important to good dental \_\_\_\_\_.
  - health
  - treatment
  - care
  - hygiene
  - restorations
- Brushing after meals helps to keep the \_\_\_\_\_ bacteria from reproducing in your mouth.
  - non-pathogenic
  - disease-causing
  - lacto-
  - bifida-
  - microscopic

**Task 5. Choose proper terms to the definitions:**

1. A mild form of gum disease that causes irritation, redness, and swelling of gums.
  - periodontitis
  - gingivitis
  - caries
  - bruxism
  - halitosis
2. Inflammation of the periodontium.
  - gingivitis
  - caries
  - periodontitis
  - bruxism
  - halitosis
3. A biofilm or mass of bacteria that grows on surfaces within the mouth.
  - calculus
  - tartar
  - caries
  - plaque
  - stone
4. A form of hardened dental plaque.
  - plaque
  - caries
  - stone
  - calculus
  - cavity
5. Bad breath.
  - periodontitis
  - halitosis
  - gingivitis
  - caries
  - bruxism
6. This word has the same meaning as “calculus”.
  - plaque
  - caries
  - stone
  - tartar
  - cavity
7. A dentist who specializes in the prevention, diagnosis, and treatment of periodontal disease.
  - stomatologist
  - pedodontist
  - periodontist
  - endodontist
  - surgeon

## Orthodontics

### Task 6. Fill in the blanks with proper words:

1. Orthodontists are dentists who specialize in the correction and prevention of irregularities in the \_\_\_\_\_ and appearance of teeth.
  - overbite
  - crowding
  - bruxism
  - alignment
  - malocclusion
2. Orthodontists can correct abnormal closure of the top teeth in relation to the bottom teeth, such as an \_\_\_\_\_.
  - alignment
  - crowding
  - overbite
  - bruxism
  - malocclusion
3. Malocclusions may be corrected with the removal of any teeth that are \_\_\_\_\_ other teeth.
  - alignment
  - overbite
  - bruxism
  - crowding
  - malocclusion
4. \_\_\_\_\_ are appliances that put pressure on the teeth to move them slowly into place.
  - bridges
  - fillings
  - braces
  - dentures
  - veneers
5. TMJ \_\_\_\_\_ is a pain in the jawline.
  - malocclusion
  - dysfunction
  - overbite
  - crowding
  - bruxism
6. Treatments for TMJ dysfunction may include wearing a **mouth protector** to prevent \_\_\_\_\_.
  - alignment
  - occlusion
  - crowding
  - denture
  - bruxism
7. \_\_\_\_\_ can be caused by a genetic imbalance between jaw and tooth size.
  - alignment
  - occlusion
  - filling
  - denture
  - crowding



8. Excessive spacing between teeth is called \_\_\_\_\_.
- crowding
  - diastema
  - alignment
  - overbite
  - malocclusion
9. Abnormal closure of the top teeth in relation to the bottom teeth is called \_\_\_\_\_.
- crowding
  - alignment
  - malocclusion
  - occlusion
  - filling
10. The dental specialist concerned with correcting the alignment of teeth is \_\_\_\_\_.
- endodontist
  - pedodontist
  - periodontist
  - orthodontist
  - oral surgeon
11. You would visit a(n) \_\_\_\_\_ for braces.
- endodontist
  - pedodontist
  - periodontist
  - orthodontist
  - oral surgeon

**Task 7. Match the beginnings and the endings of the sentences:**

<b>1</b>	<b>crowding</b>	<b>a</b>	this is a type of orthodontic malocclusion which has no vertical overlap or contact between the anterior incisors.
<b>2</b>	<b>diastema</b>	<b>b</b>	the condition in which the buccal cusps of canine, premolar, and molar of upper teeth occlude lingually to the buccal cusps of canine, premolar and molar of lower teeth.
<b>3</b>	<b>open bite</b>	<b>c</b>	this condition occurs when there is disharmony in the tooth-to-jaw size relationship or when the teeth are larger than the available space
<b>4</b>	<b>anterior crossbite</b>	<b>d</b>	this condition refers to a gap or space between the teeth. these spaces can form anywhere in the mouth but are sometimes noticeable between the two upper front teeth.
<b>5</b>	<b>overbite</b>	<b>e</b>	this condition refers to the extent of vertical (superior-inferior) overlap of the maxillary central incisors over the mandibular central incisors, measured relative to the incisal ridges.
<b>6</b>	<b>posterior crossbite</b>	<b>f</b>	this condition involves displacement of either maxillary central or lateral incisors lingual to their original erupting positions.

## Cosmetic dentistry

### Task 8. Fill in the blanks with proper words related to cosmetic dentistry:

1. \_\_\_\_\_ refers to any dental work that improves the appearance of teeth, gums, and/or bite.
  - cosmetic dentistry
  - oral surgery
  - orthodontics
  - endodontics
  - pedodontics
  
2. Cosmetic dentistry primarily focuses on improvement in overall \_\_\_\_\_ appearance.
  - face
  - smile
  - facial
  - head
  - lips
  
3. The most common types of cosmetic dentistry include composite bonding, dental implants, whitening, inlays, and \_\_\_\_\_ and veneers.
  - inlays
  - lays
  - onlays
  - withinlays
  - crowns
  
4. One of the types of cosmetic dentistry is \_\_\_\_\_ bonding.
  - porcelain
  - composite
  - amalgam
  - ceramic
  - resin
  
5. Bonding is one of the most \_\_\_\_\_ cosmetic procedures.
  - ineffective
  - time-effective
  - demanded
  - cost-effective
  - common
  
6. Bonding is used to \_\_\_\_\_ minor issues ranging from tooth decay to chipped teeth.
  - recover
  - improve
  - fill
  - whiten
  - repair

7. Cosmetic dentistry is \_\_\_\_\_ primarily on improving a person's smile.
- focusing
  - having focused
  - being focused
  - focus
  - focused
8. Cosmetic procedures may also offer some type \_\_\_\_\_ as well.
- restorative drawback
  - restorative disadvantage
  - restorative benefit
  - filling benefit
  - restorative pleasure
9. Some of the common \_\_\_\_\_ procedures can be performed by most dentists.
- cosmetological
  - mouth
  - pediatric
  - cosmetic
  - dentist
10. Dental implants are typically used to replace \_\_\_\_\_ teeth.
- missed
  - disappeared
  - erupted
  - impacted
  - missing
11. For the implant procedure, your dentist will surgically insert a small screw into the\_\_\_\_\_.
- maxilla
  - mandible
  - gums
  - gingivae
  - jawbone
12. Dental implants are said to be \_\_\_\_\_ from person's other teeth.
- natural
  - indistinguishable
  - distinguishable
  - different
  - alike
13. Having the teeth \_\_\_\_\_ is one of the most common of all cosmetic procedures.
- whitening
  - whiten
  - white
  - whitened
  - whited

14. \_\_\_\_\_ can be used to achieve shades that are even lighter than the natural tooth color.
- brushing
  - whitening
  - procedure
  - filling
  - veneering
15. \_\_\_\_\_ and onlays are also known as an indirect filling.
- overlays
  - withinlays
  - outlays
  - inlays
  - bylays
16. Inlays and onlays are \_\_\_\_\_ in a lab and are shaped to match the teeth perfectly.
- mold
  - have molded
  - molding
  - molded
  - having molded
17. Indirect \_\_\_\_\_ are typically used when there is not enough tooth to support a crown.
- traditional filling.
  - fillings
  - bridges
  - dentures
  - lays
18. Dental veneers are designed to closely \_\_\_\_\_ a person's natural teeth.
- restore
  - resemble
  - like
  - repair
  - whiten
19. Veneers are usually made from a super-strong medical-grade \_\_\_\_\_.
- filling
  - resin
  - amalgam
  - ceramic
  - ionomer
20. Veneers can be used to fill in a minor \_\_\_\_\_ between teeth.
- overbite
  - gap
  - crowding
  - overlap
  - fissure

## Common dental problems. Pharmacological terms

**Task 8. Fill in the blanks with proper words related to common dental problems and pharmacological terms:**

1. Halitosis is commonly known as \_\_\_\_\_.
  - bad smell
  - bad touch
  - poor breath
  - bad breath
  - poor smell
  
2. Other term for tooth decay is \_\_\_\_\_.
  - abscess
  - caries
  - halitosis
  - mouth
  - pain
  
3. Periodontal disease is commonly known as \_\_\_\_\_.
  - halitosis
  - gum disease
  - tongue disease
  - caries
  - abscess
  
4. \_\_\_\_\_ cancer refers to cancer that develops in any of the parts that make up the mouth.
  - palate
  - oral
  - stomach
  - lip
  - tongue
  
5. Canker sores or aphthous ulcers, fever blisters, or cold sores are referred to as \_\_\_\_\_.
  - halitosis
  - mouth sores
  - gum disease
  - tongue disease
  - caries
  
6. Candidiasis is commonly known as \_\_\_\_\_.
  - halitosis
  - thrush
  - mouth sores
  - gum disease
  - tongue disease

7. \_\_\_\_\_ is injected near the site being treated.
- antibiotic
  - tranquilizer
  - sedative
  - novocain
  - nitrous oxide
8. \_\_\_\_\_ is also known as laughing gas because it produces laughing in some patients.
- carbon dioxide
  - CO<sub>2</sub>
  - oxygen
  - nitrous oxide
  - nitrous dioxide
9. \_\_\_\_\_ can be prescribed after a dental procedure if there is a need.
- sedatives and analgesics
  - sedatives and tranquilizers
  - antibiotics and sedatives
  - antibiotics or analgesics
  - antibiotics and anesthetics
10. Two types of dental prostheses are \_\_\_\_\_ and \_\_\_\_\_.
- dentures, fillings
  - dentures, crowns
  - veneers, implants
  - dentures, implants
  - crowns, implants
11. Amalgam is a material used to \_\_\_\_\_ teeth.
- remove
  - extract
  - whiten
  - fill
  - bleach
12. Microorganisms that cause decay form \_\_\_\_\_ around the teeth and gums.
- calculus
  - tartar
  - amalgam
  - plaque
  - thrush
13. A fixed dental appliance that replaces one or more teeth is a(n) \_\_\_\_\_.
- crown
  - bridge
  - denture
  - implant
  - braces

14. DEF is the abbreviation for \_\_\_\_\_.
- diseased, extracted, or filled
  - decayed, examined, or filled
  - decayed, extracted, or filled
  - damaged, extracted, or filled
  - decayed, extracted, or finished
15. A specialist in the treatment of gum disease is a \_\_\_\_\_.
- orthodontist
  - pedodontists
  - periodontist
  - prosthodontist
  - hygienist
16. A(n) \_\_\_\_\_ treats gum disease.
- pedodontists
  - periodontist
  - orthodontist
  - prosthodontist
  - hygienist

**Task 9. Fill in the sentences with the words from the box:**

endodontist	hygienist	periodontist	prosthodontist
	orthodontist	pedodontists	

1. You would visit a(n) \_\_\_\_\_ for braces.
2. Root canals are performed by \_\_\_\_\_.
3. \_\_\_\_\_ specialize in dental treatment for children.
4. Gingivitis would be treated by a(n) \_\_\_\_\_.
5. A dental specialist in the replacement of missing teeth is a(n) \_\_\_\_\_.
6. The dental \_\_\_\_\_ is a licensed member of the dental health team who may perform extensive preventive treatment for patients.

**Task 10. Write the correct spelling in the blank to the right of any misspelled words. If the word is already correctly spelled, write "Correct":**

temparomandibuler _____	bridge _____
dicious _____	inplant _____
bycusped _____	seelant _____
moler _____	composit _____
inciser _____	permanent _____
flourid _____	hygeinest _____
vener _____	prosthodontist _____
gingevas _____	Novicain _____
amalgum _____	enamel _____

## REFERENCES

1. First Aid for USMLE Step 1 2017 / Edited by T. Le, V. Bhushan, M. Sochat, Y. Chavda, K. Kallianos, A. Zureick, M. Kalani. - McGraw Hill Education, 2017.
2. Kuchumova N. V., Manyuk L. V., Vasylenko O. H. English for Dentistry Students. Step 1: Anatomy: Textbook / N. V. Kuchumova, L. V. Manyuk, O. H. Vasylenko; edited by P. A. Sodomora. – Danylo Halytsky Lviv National Medical University, 2019. –102 p.
3. Marie McCullagh, Ros Wright. Good Practice. Communication Skills in English for Medical Practitioner. – Cambridge University Press, 2008. – 176 p.
4. Medical terminology: language for healthcare/Nina Thierer . . . [et al.]. — 3rd ed.
5. More English for Medical Students: Textbook / L. V. Manyuk. –Lviv: Danylo Halytskyi Lviv National Medical University, 2014. –160 p.
6. Oxford Dictionaries. Online. Available at: <http://www.oxforddictionaries.com/>
7. Sam McCarter. Oxford English for Careers. Medicine 1. Student’s book. – Oxford University Press, 2009. – 143 p.
8. Sam McCarter. Oxford English for Careers. Medicine 2. Student’s book. – Oxford University Press, 2010. – 143 p.
9. Іноземна мова для студентів-стоматологів: Підручник / О.С. Ісаєва, Н.В. Кучумова, М.Ю. Шумило / Львів, 2008.
10. Іноземна мова за професійним спрямуванням: Стоматологія = English for Professional Use: Dentistry: підручник / І.Г. Романко, І.М. Сологор, О.М. Беляєва, Ю.В. Лисанець. — К. : ВСВ “Медицина”, 2015. — 224 с.
11. Кучумова Н. В. English For Medical Students. Module 1: Посібник з іноземної мови для студентів першого курсу медичного факультету / Н.В. Кучумова. – ЛНМУ ім. Данила Галицького. – Львів, 2010. – 141 с.