

Chapter -2

Digestion and the Role of Microbes

New words -

1. temporary	5. enamel	9. digestion	13. ringworm
2. permanent	6. dentine	10. oesophagus	14. tuberculosis
3. canines	7. blood vessels	11. protozoa	15. dysentery
4. incisors	8. plaque	12. influenza	16. malaria

Define the following –

- 1) **Temporary teeth**- The first set of 20 teeth in a child is called temporary teeth. They are also called milk teeth.
- 2) **Permanent teeth** – The new set of 32 teeth in an adult is called permanent teeth.
- 3) **Digestive system** – The system of some organs that helps a body to digest the food is known as digestive system.
- 4) **Germs**- Harmful microbes are called germs.
- 5) **Microscope** – It is an instrument that is used to see microbes.

III) Answer the following questions.

Q1) What are the different types of teeth? Ans.

There are four different types of teeth-

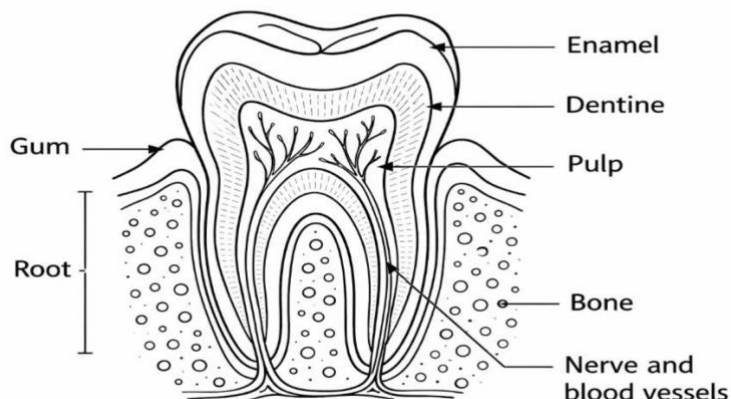
- 1) Incisors – cutting and biting teeth
- 2) Canines – tearing teeth
- 3) Premolars – crushing teeth
- 4) Molars – grinding teeth

Q2) Describe the structure of a tooth.

Ans. A tooth has a crown and a root. The part of the tooth we can see is the crown whereas the root is the part inside the gums. The structure of tooth is as follows-

- 1) Enamel- The white part on the outside of a tooth is called the enamel.
- 2) Dentine- The part below the enamel is dentine.
- 3) Pulp- The part inside dentine is called pulp. It is very soft and full of nerves and blood vessels.

Structure of a Tooth



Q3) Write any five ways in which we can protect our teeth.

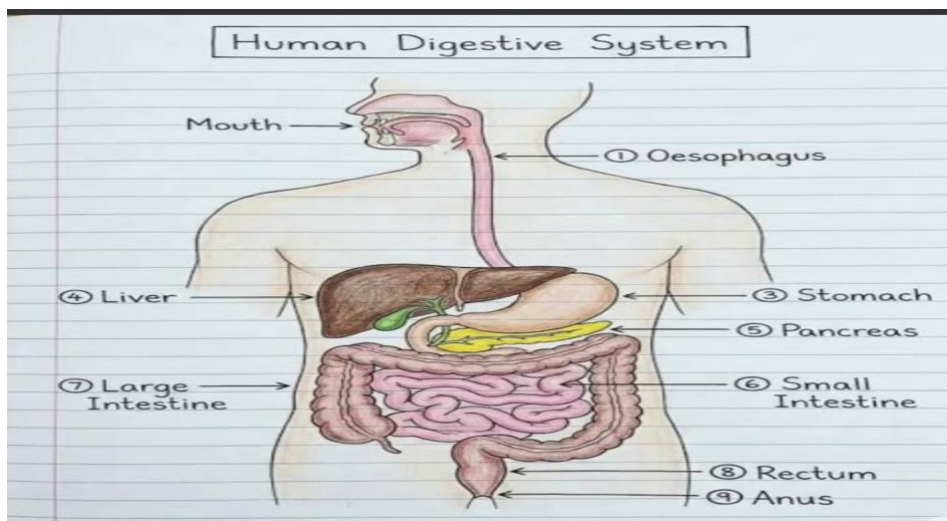
Ans. The ways in which we can protect our teeth are-

- 1) Rinse your mouth well after meals.
- 2) Brush your teeth at least twice a day.
- 3) Avoid eating too many sweets, sugary snacks or soft drinks.
- 4) Visit the dentist regularly for check-up.
- 5) Eat food that is healthy for teeth and gums.

Q4) What is digestion? Name any five parts of the digestive system. Ans. The process by which food is broken down into a simple form so that it can be easily absorbed by the body is called digestion.

The main five parts of the digestive system are-

- 1) Mouth
- 2) Food pipe or oesophagus
- 3) Stomach
- 4) Liver
- 5) Large intestine
- 6) Small intestine



Q5) What are microbes? Give any three uses of microbes.

Ans. Small living things that can be seen only with the help of a microscope are called microbes. Uses of microbes are given below-

- 1) To make bread and bun
- 2) To change milk into curd.
- 3) To help in the digestion of food
- 4) To help in the process of rotting of dead plants and animals.

Q6) Name any four microbes and two diseases each of them causes.

Ans. There are four types of microbes that causes diseases –

- 1) Bacteria- typhoid, cholera, tuberculosis.

- 2) Viruses- common cold, influenza, polio
- 3) Fungi- ringworm, athlete's foot
- 4) Protozoa- food poisoning, dysentery and malaria.

Let's Apply (pg no. 33)

Q1) The doctor told Mariam that eating too many candies may harm her teeth. Do you think the doctor is right? Why?

Ans: Yes, the doctor is right. Candies contain a lot of sugar, which helps germs grow in the mouth. These germs can damage teeth and cause cavities.

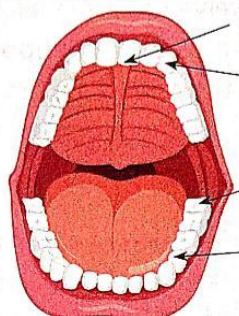
2. Maya forgot a bowl of milk overnight on the windowsill. Next day, the milk had changed to curd. Why do you think this happened?

Ans. This happened because milk contains bacteria. When milk is kept outside for a long time, these microbes grow and change the milk into curd.

Let's Remember

Label the different types of teeth and then write the correct words from the word box against each.

Biting, tearing,
grinding, crushing



incisors (biting)
canines (tearing)
molars (grinding)
premolars (crushing)

Let's Remember

A. Match the following.

Column A	Column B	
1. Mouth	a. Removes faeces	
2. Stomach	b. Saliva	
3. Food pipe	c. Absorption of useful substances	
4. Small Intestines	d. Sac-like organ	
5. Anus	e. Tube-like organ	

B. Write T for the True and F for the False statements.

1. We should brush our teeth once a day. **F**
2. We should always wash our hands before and after meals. **T**
3. Microbes are small enough to be seen with the naked eye. **F**
4. All microbes cause diseases. **F**
5. Tuberculosis is caused by a fungi. **F**

Ans.
1. b
2. d
3. e
4. c
5. a

TEXT BOOK EXERCISE -



Exercises



LET'S UNDERSTAND



I. Objective type questions

A. Fill in the blanks with the correct words.

1. There are 32 (20/32) teeth in a permanent set of teeth.
2. In flesh-eating animals, canines (incisors/canines) are bigger and sharper for tearing flesh.
3. The pulp (pulp/dentine) forms the central part of the tooth.
4. The liver (food pipe/liver) produces juices that help in digestion of food.
5. Virus (Bacteria/Virus) cause diseases like common cold and influenza.

B. Write T for the True and F for the False statements.

1. The crown holds the teeth in their place. F
2. We should keep our teeth clean. T
3. The oesophagus holds food that cannot be digested and absorbs water from it. F
4. Microbes cannot be seen with the naked eye. T
5. Only microbes such as virus and bacteria can cause diseases. F

C. Choose the correct option.

1. Which of these teeth are 12 in number in a permanent set, and help in grinding food?
a. Incisors b. Canines c. Premolars d. Molars
2. Which of these are used for cutting and biting food?
a. Incisors b. Canines c. Premolars d. Molars
3. Which part of a tooth contains nerves and blood vessels?
a. Crown b. Dentine c. Pulp d. Gums
4. Which of these holds the teeth in place?
a. Canine b. Gums c. Tongue d. Nerves
5. Where are faeces formed?
a. Anus b. Large intestines c. Small intestines d. Stomach
6. Where does digestion begin?
a. Mouth b. Stomach c. Small intestines d. Large intestines

7. What do microbes do?
 - a. Change milk into curd
 - b. Help in making bread
 - c. Help in the process of rotting of dead plants and animals
 - d. All of these
8. Which of these diseases is caused by bacteria?
 - a. Typhoid and influenza
 - b. Influenza and common cold
 - c. Typhoid and cholera
 - d. Malaria and food poisoning

II. Very short answer type questions

A. Give one word for the following.

1. The set of teeth in a child
2. The hardest substance in the human body
3. A yellow sticky layer that germs form on teeth
4. The organ that helps to remove faeces from the body
5. An instrument that we use to see microbes

Temporary teeth
 Enamel
 Plaque
 Anus
 Microscope

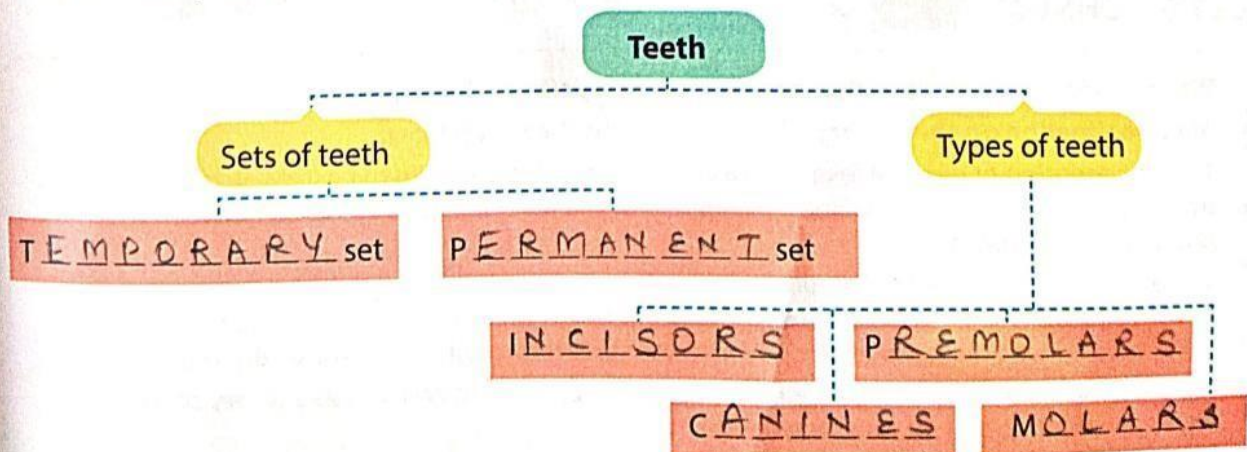
III. Answer the following questions.

1. What are the different types of teeth?
2. Describe the structure of a tooth.
3. Write any five ways in which we can protect our teeth.
4. What is digestion? Name any five parts of the digestive system.
5. What are microbes? Give any three uses of microbes.
6. Name any four microbes and two diseases each of them causes.

LET'S RECALL



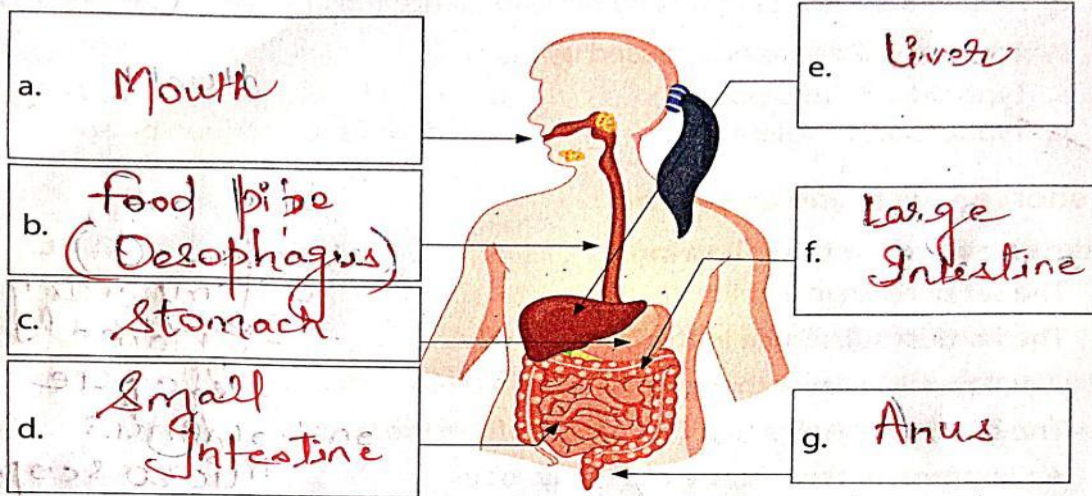
Recall and complete the concept map given below.



LET'S OBSERVE



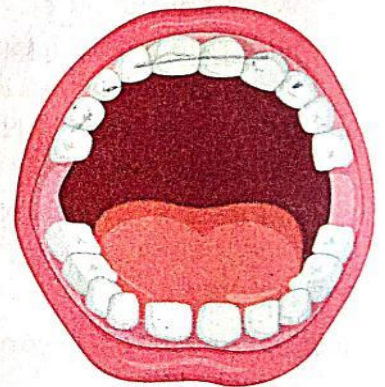
1. Label the digestive system.



2. a. Which set of teeth is shown here? **LO 4**
Temporary (Temporary/Permanent)

b. Write the correct number of the following teeth found in this set:

- i. Incisors 8
- ii. Canines 4
- iii. Premolars 8
- iv. Molars 8



LET'S CONNECT SOCIAL STUDIES



We can create timelines with years and key activities in those years.

Make a timeline on the history of dengue, using the text below:

The first mention of dengue fever is in a Chinese book from the Jin dynasty which was in power from 265–420 CE. In modern times, the spread of the fever is traced to Africa between the 15th and the 19th centuries.

The earliest dengue epidemic (outbreak of a disease that spreads rapidly) is reported from 1779–1780 which spread across Asia, Africa, and North America. By 1907, it was confirmed that dengue fever was caused by a virus, which was spread through Aedes mosquito bites.

Dengue spread on a very large scale during the Second World War. In 1953, a very severe dengue epidemic took place in the Philippines.