



# Teeth and Digestive System

## Focus On

- Kinds of Teeth
- The Digestive System
- Healthy Eating Habits

## Teacher's Aid

- Posters showing parts and types of tooth and digestion system.
- A model of human teeth.

## ▼ Here We Go...

Complete the sentences :

Brush your teeth \_\_\_\_\_

Rinse your mouth \_\_\_\_\_

Chew your food \_\_\_\_\_

Change your toothbrush \_\_\_\_\_

Do not eat \_\_\_\_\_

Include salad and \_\_\_\_\_



## Teeth

**Teeth** help us to bite and chew our food. This helps food to digest properly. Teeth also help us to speak clearly and give shape to our face.

All humans have two sets of teeth through their life.

When we are born, we don't have teeth. Its only after six to seven months that our teeth start growing out of the gums. By the time we grow 2-3 years old, we have 20 teeth. This set of 20 teeth is called **milk teeth** or **temporary teeth**.

### Fact Byte

- ❖ A human gets its last teeth when he is getting older and wiser. That is why these teeth are called wisdom teeth. They are called the third molar also and grow at the back of the mouth, one in each corner.

## Kinds of Teeth

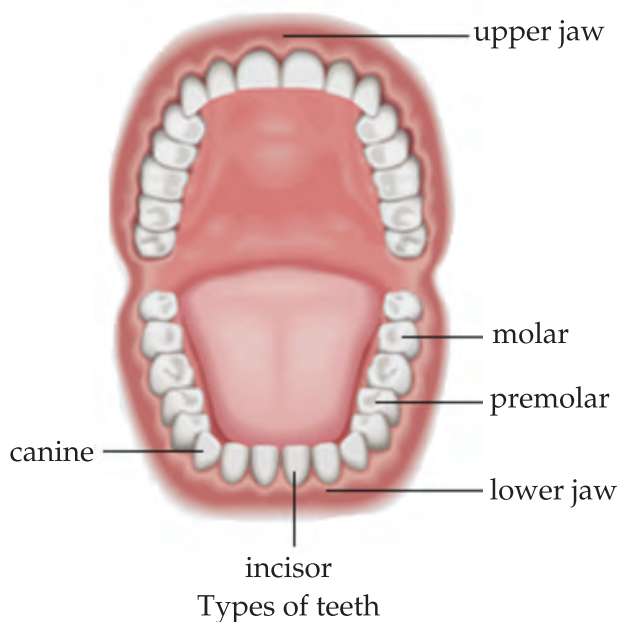
Teeth are divided into four kinds on the basis of the functions they perform : incisors, canines, premolars and molars are four kinds of teeth.

**Incisors** : The incisors are chisel-shaped teeth with sharp and flats ends at the front of the mouth. An adult has eight incisors – four in each jaw. They are used for biting and cutting the food.

**Canines** : Canines are pointed and sharp teeth. These are present right next to the incisors in both the jaws. There are four canines in an adult's mouth—two in each jaw. They are used for tearing and ripping the food.

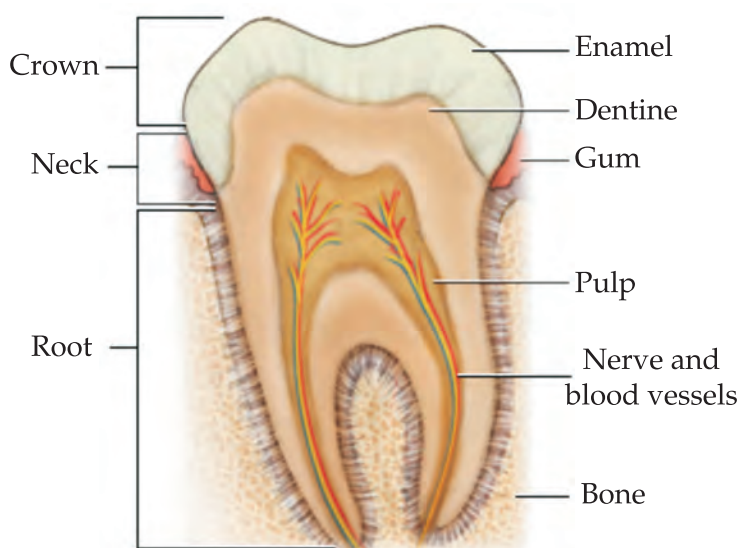
**Premolars** : Next to canines are the flat and broad teeth called **premolar**. There are eight Premolars—four in each jaw in an adult's mouth. Premolars are bigger, stronger and have ridges, which make them perfect for crushing and grinding food.

**Molars** : Molars are present behind the premolars. They are twelve—six on the upper jaw and six on the lower jaw. As compared to the premolars, molars are bigger and wider. They have more ridges. They are used for grinding and chewing the food.



### HOTSPOT

Carnivorous animals like lions and tigers have sharp pointed canines. Can you guess why?



Parts of a tooth

## A Tooth and Its Parts

Although teeth differ in their function, yet they have a basic structure. A tooth may be divided into two parts – **crown** and **root**. The part of the tooth above the gum is **crown** and the part inside the gum is called the **root**. A hard protective layer covers the crown called **enamel**. It is the hardest substance of our body. Under the enamel lies **dentine**. Dentine is sensitive to cold and heat. Inside the dentine lies the innermost part of the

tooth called **pulp**. It contains blood vessels and nerves and it nourishes the dentine. The soft tissue that surround the base of the tooth is called the **gum**. On the base of the dentine and pulp of a tooth beneath the gum, we find the tooth's root. These roots holds the tooth firmly to the gums.

### Find Out

At what age do adults start losing their permanent teeth?

### A Step Ahead

Ancient civilizations used a 'chew stick', which was a thin twig with a frayed end. These were rubbed against the teeth.

In India, we use neem sticks to clean our teeth. It has medicinal effects. The bristle toothbrush, similar to the type used today was not invented until 1498 in China. The bristles were actually the stiff, coarse hair taken from the back of a hog's neck and attached to handles made of bone or bamboo.

Boar bristles were used until 1938, when nylon bristles were produced by Dupont all Nemours. The first nylon tooth brush was called Doctor West's Miracle toothbrush.

The first mass produced toothbrush was made by William Addis in England around 1780.

## Take Care of Your Teeth

Taking care of the teeth is very important, otherwise we may have to face various dental problems. Small particles of food remain stuck in the spaces between the teeth in our mouth when we eat something. These need to be cleaned regularly otherwise germs start growing on them and form a sticky yellow coating known as **plaque**. These germs eat away tooth enamel, causing holes called **cavities**. Plaques also cause cavity that can make our gums red, swollen and sore.

This leads to several other problems like toothache, bad breath etc.

Some ways to protect teeth from decaying are as follows :

- ❖ Brush your teeth after every meal. If not possible, brush at least twice a day. Rinse your mouth after every meal. Make sure you brush properly and in the right manner.
- ❖ Use floss to clean the gaps between the teeth. Do not use any sharp pointed object. This floss gets rid of food scraps that are hidden where the tooth brush can't reach.
- ❖ Do not damage your gums while brushing.
- ❖ Brush for at least 2-3 minutes.



- ❖ Use only soft bristles toothbrush.
- ❖ Change your toothbrush after every three months.
- ❖ Clean your tongue daily with a tongue cleaner.
- ❖ Visit your dentist regularly for check-ups.
- ❖ Do not eat too many sweets and chocolates and avoid drinking too many sweet drinks.
- ❖ Eat lot of fruits and vegetables which are healthy for your teeth and gums. Food rich in calcium like milk and cheese are good for teeth.

When anybody has crooked teeth, the dentist advises to wear an appliance called **teeth braces**. This presses on crooked teeth so that they gradually become more even.



Teeth braces

## Let's Recall

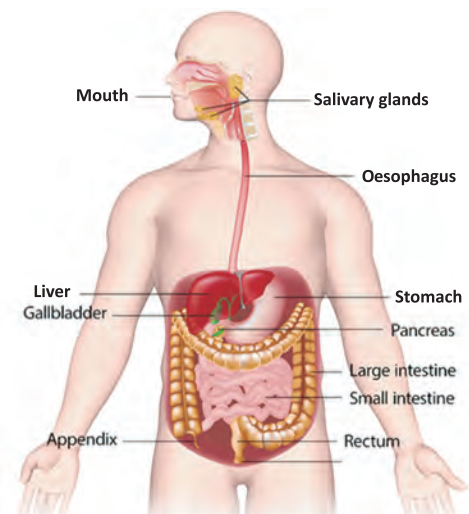
### Fill in the blanks :

1. Pulp is the \_\_\_\_\_ part of the tooth.
2. Plaque is \_\_\_\_\_ for teeth.
3. \_\_\_\_\_ start appearing on the age of 6-7 months.
4. The \_\_\_\_\_ firmly holds the tooth to the gum.
5. A child has a set of \_\_\_\_\_ teeth.

## The Digestive System

We know that all living things need food to obtain energy, grow and stay healthy and free of diseases. The different items of food we eat cannot provide us energy directly. It needs to be converted into simpler substances that the body can use. The process by which food is converted into simpler form which our body can absorb is called **digestion**.

The digestive system comprises of several organs. Each organ performs a special task to complete **digestive system**.



The digestive system

## Digestion

The digestive process begins in the **mouth**. Food is first softened with a watery substance called saliva. Saliva is a digestive juice produced by the salivary glands. The teeth and tongue break up this softened food into small parts. The food is then swallowed and moves down to oesophagus.

**Oesophagus** is a tube which passes the food to **stomach**.

The stomach is a sac like organ that squeezes and breaks the food into smaller particles.

The **liver** secretes a digestive juice which helps in the digestion of food and absorption of nutrients. It secretes this juice into the **small intestine**.

From the stomach, the food passes into small intestine. The walls of small intestine absorb the broken down food particles and then these are carried to the other different organs by blood.

Food that is not digested moves to the **large intestine**.

The minerals and extra water are absorbed by the blood in large intestine. The rest material is called **faeces** that is then expelled out of the body through the **anus**.

### HOTSPOT

Which organ secretes juices in small intestine :

- (a) stomach      (b) Large intestine  
(c) Oesophagus    (d) liver

## Healthy Eating Habits

Now we know that our digestive system works very hard to provide the necessary nutrients that our body needs from the food we eat. Following eating habits will help to keep the body fit and healthy.

- ❖ Wash your hands properly before and after every meal.
- ❖ Drink a lot of water. It helps to remove the waste products from the body.
- ❖ Eat slowly and chew the food properly before swallowing.
- ❖ Eat a balanced diet that includes fibre rich food. The presence of fibre makes it easier for your body to pass out the waste.
- ❖ Take small portions of meals at regular intervals. Do not overeat.



## Let's Recall

Write T for True and F for False statements :

1. Oesophagus mixes saliva to food.
2. Each part of the body has a specific job to do.
3. Liver works with small intestine.
4. The faeces is expelled out of large intestine.
5. Roughage is harmful for our body.

## Flash On

- \* There are four kinds of teeth : incisors, canines, premolars and molars.
- \* Crown and root are the two main parts of a tooth.
- \* Inside layers of a tooth are enamel, dentine and pulp.
- \* The process of digestion begins in the mouth.
- \* Mouth, oesophagus, stomach, small intestine, liver, large intestine and anus are the organs that altogether make digestive system.

## Words to Know

<b>Incisor</b>	: Teeth that cut and chop the food	<b>Canines</b>	: Teeth used to tear the food
<b>Molars</b>	: Teeth used to crush the food		
<b>Premolars</b>	: Teeth used to crush and grind the food		
<b>Enamel</b>	: Upper hard layer of the crown	<b>Crown</b>	: Upper part of the tooth
<b>Root</b>	: Lower part of the tooth that holds the tooth into gum		
<b>Dentine</b>	: Inner layer of enamel		
<b>Pulp</b>	: The innermost part of a tooth		

## Exercise

A. Tick (✓) the correct answer :

1. The number of teeth a baby has at 6-7 months is :  
(a) 20  (b) 24  (c) 32
2. The number of teeth an adult may have are :  
(a) 26  (b) 32  (c) 40
3. It is used to tear food.  
(a) Incisor  (b) Premolar  (c) Canine
4. Part of the tooth above the gum is called :  
(a) dentine  (b) pulp  (c) crown

5. Minerals and water are absorbed by :

(a) blood

(b) oesophagus

(c) liver

**B. Fill in the blanks by choosing the words from the help box :**

small, minerals, root, enamel, incisors

1. The crown of the tooth is covered with a hard layer called \_\_\_\_\_.
2. The chisel shaped teeth that are used for cutting the food are called \_\_\_\_\_.
3. \_\_\_\_\_ holds the teeth into the gum.
4. \_\_\_\_\_ intestine plays a significant role in digesting the food by adding different secretions to it.
5. Blood absorbs the \_\_\_\_\_ and water from the walls of large intestine.

**C. Write T for True and F for False statements :**

1. A child has the maximum number of 20 milk teeth.
2. An adult has 32 permanent teeth.
3. Molars are used to tear food.
4. The innermost part of a tooth is called the crown.
5. The broken down food particles are absorbed by the walls of the liver.

**D. Match the following :**

**Column A**

1. Saliva
2. Plaque
3. Sac-like organ
4. Liver
5. Enamel

**Column B**

- (a) stomach
- (b) digestive juices
- (c) hard covering
- (d) mouth
- (e) bacteria

**E. Answer the following in short :**

1. Name different types of teeth.
2. Name the different parts of a tooth.
3. What is oesophagus?
4. Why does a dentist suggest braces?
5. Where does the process of digestion begin?

**F. Answer the following in detail :**

1. How many kinds of teeth a human being have?

2. Mention a few ways to protect teeth from decaying.
3. How does our digestive system work?
4. How are large and small intestines significant in digestion of food?
5. Mention a few ways to keep the digestive system working well?

**Practice Time**

**G. Your Turn :**

Divide the class into two groups. They would ask each other about :

1. Do they brush their teeth?
2. How many times they brush their teeth?
3. Do they rinse their mouth after eating anything?
4. In how much time they change their toothbrush?

**H. Make a chart on parts of a tooth.**

**I. Show digestive system by making a colourful chart.**

**J. Write the food habits of following animals by observing their teeth :**



**Have Fun**

❖ **Rearrange the following jumbled names of organs related to digestive system :**

- THUOM \_\_\_\_\_
- OHPSUAEOGS \_\_\_\_\_
- ARLEG NISTEETNI \_\_\_\_\_
- LAMSL NISTEETNI \_\_\_\_\_
- VIREL \_\_\_\_\_
- TSAMHOC \_\_\_\_\_
- SNAU \_\_\_\_\_