

## **Louis Pasteur**

**1) Answer the following questions to check your understanding :**

**a) What happened one day while Louis Pasteur was playing with his friends?**

**Ans:-** One day while Louis Pasteur was playing with his friends, a man came running to him. The man was very frightened.

**b) What does rabies cause in human beings?**

**Ans:-** Rabies causes inflammation of the brain in human beings. They go mad and die.

**c) What experiment did Pasteur conduct on rabbits ?**

**Ans:-** Pasteur, in his experiments treated the ailing rabbits by injection them with the same virus and succeeded in curing them.

**d) Who was Pasteur's first human patient ? Was his treatment successful ?**

**Ans:-** A school boy was Pasteur's first human patient. Yes, he was successful.

**e) Where and when did the French government establish the Pasteur Institute ? What is it famous for ?**

**Ans:-** The French government established the Pasteur Institute in Paris in 1888. It is famous for its study of biology, micro – organism, diseases and vaccines.

**2) You must have noticed that the lesson has many words related to diseases. Read the lesson carefully and note down all these words in the word web below. One has been done for you.**

**Ans:- DISEASE :-**

i) Virus

ii) Aids

iii) Malaria

iv) Rabies

v) Ailing

vi) Inflammation

vii) Rubella

viii) Measles.

**3) Here are five friends sharing information about diseases. Complete their dialogues with information from the lesson.**

**a) Puja :- Beware of animal bites**

.....  
.....

**Ans:-** Puja :- Beware of animal bites because they may cause rabies.

**b) Rohan :- Measles is a deadly disease. It can lead to**

.....  
.....

**Ans:- Rohan :-** Measles is a deadly disease. It can lead Pneumonia, Diarrhoea and other life-threatening complications.

**c) Pushpa :- Rubella infection can lead to**

.....  
.....

**Ans:-** Pushpa :- Rubella infection can lead to blindness, deafness, mental retardation and congenital heart defects.

**d) Jumon :- The anopheles mosquito**

.....  
.....

**Ans:- Jumon :-** The anopheles mosquito is a carrier of Malaria.

**4) Do you know what a flowchart is ? It is a diagram that shows how one thing leads to the next. Read the lesson once again and complete the flowchart to show the chain of events. The first entry has been inserted for you.**

**Ans:-** a) Pasteur sees a man bitten by a mad wolf.

b) The man suffers from rabies.

c) It causes the inflammation of his brain.

d) He goes mad.

e) He dies of the deadly disease.

**5) Here are some sentences from the lesson.**

**A man came running towards Louis Pasteur. The man was very frightened. "What is the matter ?" Louis asked him. Someone has been bitten by a mad wolf from the mountain.**

**Look at the words printed in italics.**

**Can you recall which grammatical structure is represented by the words in italics ? Fill in the blank spaces provided below to give the answer.**

**The words printed in italics are in the P..... voice.**

**Ans:-** Passive.

By changing the verb forms, the sentences can also be written in the following way :

a) A mad wolf from the mountain has bitten someone.

This sentence is in the A..... Voice.

**Ans:-** Active.

Now, read the lesson and find out other sentences in Active voice. Reframe these sentences if necessary. Then convert them into their Passive forms.

**Ans:-** a) Suddenly he saw a man running towards him.

**Passive :-** Suddenly a man running towards him was seen by him.

**b) Human beings get the virus .....**

**Passive :-** The virus is got by human beings .....

**c) The incident disturbed him.**

**Passive :-** He was disturbed by the incident.

**d) Pasteur found the virus that causes rabies.**

**Passive :-** The virus that causes rabies was found by Pasteur.

**e) He treated the ailing rabbits.**

**Passive :-** The ailing rabbits were treated by him.

**f) Can you save my son, Sir ?**

**Passive :-** Can my son be saved, sir ?

**g) He injected the boy with the virus.**

**Passive :-** The boy was injected with virus by him.

**6) a) Let's learn some tense forms :**

We use the Simple Present tense

**i) To express universal truths :**

**Animals with rabies grow mad.**

**ii) To express habitual or repeated action :**

**Louis Pasteur plays with his friends.**

**iii) To indicate situations that are permanent :**

**He works in the institute.**

**b) We use the Present Continuous tense to express an action that is presently going on :**

**He is working on his experiment.**

**c) Now complete these sentences using the Simple Present or the Present Continuous forms of the verbs in brackets :**

**i) We ..... football in the afternoon. (play)**

**Ans:- play.**

**ii) The sun ..... in the east. (rise)**

**Ans:- rises.**

**iii) Don't make a noise ; the baby ..... . (sleep)**

**Ans:- is sleeping.**

**iv) Someone ..... at the door ; can you hear it ? (knock)**

**Ans:- is knocking.**

**v) The man ..... towards the bus. (run)**

**Ans:-** is running.

**vi) The bus usually ..... at 8 o'clock. (come)**

**Ans:-** comes.

**vii) He ..... for an engineering entrance examination.  
(prepare)**

**Ans:-** is preparing.

**viii) He ..... German. (learn)**

**Ans:-** is learning.

**7) a) We use the Simple Past tense :**

**i) To talk about an action that has already taken place, e.g.**

**This method of treatment of rabies made Pasteur famous all over the world.**

**ii) To show a series of completed actions, e.g.**

**He injected the boy with the virus and kept him under watch.**

**b) We use the Past Continuous tense :**

**i) to refer to an action that was going on for a certain period of time in the pass. e.g.**

**One day, a boy called Louis Pasteur was playing with his friends.**

**ii) To show that something happened while another action was going on, e.g.**

Many years later, when he was experimenting on rabbits, he found the deadly virus that causes rabies.

c) Let's see how much you have understood. Complete these sentences using the Simple Past or the Past Continuous forms of the verbs in brackets.

i) Louis Pasteur ..... in 1895. (die)

Ans:- died.

ii) Pasteur knew that the mad wolf ..... from rabies. (suffer)

Ans:- was suffering.

iii) When I reached his house, he ..... lunch. (have)

Ans:- was having.

iv) I ..... last evening. (arrive)

Ans:- arrived.

v) The boys ..... football when it suddenly began to rain. (play)

Ans:- were playing.

8) Imagine you are the young boy who was bitten by the mad dog. You are telling your friends what happened when you were coming home from school. Fill in the gaps in the passage below with correct forms of the verbs to complete your story.

Yesterday I ..... (return) from school alone. One the way I ..... (see) a group of boys around a dog. The dog ..... (seem) to be mad, and the boys ..... (throw) stones at it. This ..... (make) the dog angry and frightened. The dog

..... (begin) to bark angrily. The boys  
 ..... (find) this very funny and they  
 ..... (hit) the dog with a stick. I  
 ..... (stand) nearby quietly.  
 Suddenly the dog ..... (rush) at me and  
 ..... (bite) me. I ..... (shout) to the  
 boys to help me. But they ..... (run) away. The dog  
 ..... (is) so angry that it ..... (will)  
 not let go of my leg. Finally, three men from a nearby shop  
 ..... (come) out and ..... (chase)  
 the dog away.

**Ans:-** Yesterday I was returning from school alone. One the way I saw a group of boys around a dog. The dog seemed to be mad, and the boys were throwing stones at it. This made the dog angry and frightened. The dog began to bark angrily. The boys found this very funny and they hit the dog with a stick. I was standing nearby quietly. Suddenly the dog rushed at me and bit me. I shouted to the boys to help me. But they run away. The dog was so angry that it would not let go of my leg. Finally, three men from a nearby shop came out and chased the dog away.

**9) Here are a few words from the lesson. See if you can match the words to their meanings :**

**a) Scared – a living thing, too small to be seen without a microscope, that causes infectious diseases.**

**b) Scratched – sick and not improving.**

**c) Ailing – to be frightened of something or afraid that something bad might happen.**

**d) Virus – a very small living thing that you can only see under a microscope.**

**e) Micro-organism – when the skin is cut or damaged slightly with something sharp, such as nails.**

**Ans:-** a) Scared – to be frightened of something or afraid that something bad might happen.



b) Scratched – when the skin is cut or damaged slightly with something sharp, such as nails.

c) Ailing – sick and not improving.

d) Virus – a living thing, too small to be seen without a microscope, that causes infectious diseases.

e) Micro-organism – a very small living thing that you can only see under a microscope.

**10) Look at the pictures given below. Write sentences in the boxes using words from the lesson to describe the pictures.**

Ans:- a) The dog is biting the boy.

b) The dog has bitten the boy.

c) A doctor has examined the boy.

d) The boy feels well now.

**11) Look at the following sentences. They are in Direct speech. Imagine you are reporting the conversation to someone. Rewrite the sentences in Indirect/Reported Speech.**

a) “What is the matter ?” Louis asked him.

Ans:- Louis asked him what the matter was.

b) “Can you save my son ?” The woman asked Louis.

Ans:- The woman asked Louis if he could save her son.

c) “I’ll do whatever I can,” said Louis to the boy.

Ans:- Louis told the boy that he would do whatever he could.

**12) Work in groups. Make a poster (using pictures and captions) to create public awareness of what happens when mosquitoes and animals bite. Remember to mention the (i) diseases, (ii) their prevention and (iii) their cure.**

**Ans:-**

BEWARE OF MOSQUITO & ANIMAL BITES

PREVENT MALARIA & RABIES

Use nets and repellents and keep away from animals.

CONSULT DOCTOR IF VICTIMISED

**13) Mamu was trying to write about Florence Nightingale for her school magazine on the occasion of World Health Day. Let's see how she prepared to write it :**

- First she made a mind map for her passage. She wrote down important words and phrases related Florence Nightingale so that she could include them in her passage.

Lady with the Lamp –

1) Lamp in her hand.

2) Parents

3) Crimean War 1854.

4) Military hospital at Scutari in Turkey .

5) Many languages.

6) Voice of God.

7) Serve the people.

8) Sick and wounded soldiers.

9) Filthy and unhygienic

10) Tough fight.

11) Attended to every patient.

12) Love and sympathy.

- Then she organized the points and wrote her first draft.
- After that, she revised her draft and wrote the final copy.

**Read her final copy and do the task that follows.**

Florence Nightingale was the second daughter of William Edward Nightingale and Frances (Fanny) Smith. From her childhood Florence Nightingale wanted to serve people. So, she completed a course in nursing to serve sick and old people. When the Crimean War broke out in 1854, she volunteered at once to go to Constantinople to serve the sick and wounded soldiers.

She took three nurses with her but Sydney Herbert, the then Secretary of State at War, wanted her to take out a much larger party of nurses. She was officially asked to take charge of the nursing in the military hospital at Scutari in Turkey. The party left England in October 1854. They reached the barrack hospital at Scutari on November 5. On arrival she found that the hospital were overcrowded. Everything was filthy and unhygienic.

Patients had to lie even in the corridors. She had a tough fight with the administration to set everything in order. She spent many hours a day in the wards. She attended to every patient and comforted them with love and sympathy. She used to move in the wards each night comforting wounded soldiers with a lamp in her hand.

The wounded soldiers began to call her The Lady with the Lamp. Soon, she became the symbol of love and hope for all. Her lamp lit up their lives with a healing touch. Florence Nightingale realised that human love was as important as medicine for healing. To her, the best way to serve God was to serve the suffering people.

**Now think of a few words to describe Florence Nightingale.**

**Working with a partner, draw/ paste a picture of Florence Nightingale in a piece of chart paper, and paste around the picture all the words that you have written to describe her.**

**Ans:-** The Lady with the lamp.

Crimen war

Military hospital at Scutari in Turkey

Love and sympathy,

Tough fight against unhygienic condition

Serve the wounded soldiers.

14) Read the definition given below :

**A proceed is a well – known phrase or sentence that gives advice or says something that is generally true.**

**Some examples of proverbs are –**

**Absence makes the heart grow fonder.**

**An apple a day keeps the doctor away.**

**The most important function of proverbs is to teach people good morals.**

**They often contain advice, with the purpose of teaching wisdom to common people. Since proverbs are usually metaphorical and indirect, they allow writers to express their advice in a less harsh way.**

**Pick out the proverbs from the list given below :**

**a) A white elephant.**

**b) Crocodile tears.**

**c) All that glitters is not gold.**

**d) Every cloud has a silver lining.**

**e) Early to bed and early to rise makes a man healthy, wealthy and wise.**

**f) A black sheep.**

**Ans:- c) All that glitters is not gold.**

**d) Every cloud has a silver lining.**

**e) Early to bed and early to rise makes a man healthy, wealthy and wise.**

**Now, read the lesson carefully. Then, using the text as the basis, in groups discuss and prepare a speech on the following proverb:**

**Prevention Is Better Than Cure.**

**Remember to prepare the speech from the perspective of maintaining good health. The group leader or any other member chosen by the group will then present the speech before the class. The class will vote for the best speech among the groups. The teacher will suggest necessary improvement to the groups.**

**The speech voted to be the best by the class will then be made before the morning assembly of the school.**

**Ans:- Friends,**

Of all diseases, rabies and malaria are the two of which we can always be said that prevention is not only better than cure but also much easier. These are caused by mosquito and animal bites.

In order to prevent these deadly diseases we don't have to spend much. We have to be aware of the mosquitoes and animals. Nets and repellants should be

used. Domestic animals should be injected with drugs so that they can not have rabies. One should always keep safe distance from other animals.

**15) Prepare a quiz on the lesson Louis Pasteur.**

**Each group will select a quizmaster and a scorer to conduct the quiz and keep the scores. The quiz will be held among the groups other than the group conducting the quiz. Each group will take turns to conduct the quiz in the class.**

**The groups will make a note of the questions of each group. Then all the questions will be compiled by the class and the answers will be written down in their notebooks. (You may refer to Lesson 3 for ideas.)**

**Ans:-** Do yourselves.

**16) Fun with sounds : practice saying this tongue twister as fast as you can.**

**Four Frenchmen from France fried forty – five flying fish that fly faster than flat flying fleas.**

**Now, in pairs, make a tongue twister using information from the lesson, and make your friends say it for fun.**

**Ans:-** Later Louis learnt to deal with the deadly disease.