

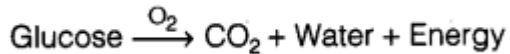


Respiration in Organisms Class 7

Question 1.

What are the end products of aerobic respiration.

Answer: During aerobic respiration, carbon dioxide and water are released along with a large amount of energy.



Question 2.

The cellular respiration process takes place in which cell organelle?

Answer: Cellular respiration takes place in the mitochondria of the cell.

Question 3.

Name the end products of anaerobic respiration in yeast.

Answer: The end product formed during anaerobic respiration in yeast are

- Ethyl alcohol
- Carbon dioxide
- Energy

Question 4.

In some animals, exchange of gases takes place through its thin and moist skin. Name one such animal.

Answer:

Earthworm is an animal where exchange of gases during breathing or respiration takes place through its thin and moist skin.

Question 5.

Give the name of respiratory organs in following animals.

(a) Fish

(b) Human being

Answer:
The respiratory organ of the following animals are as follows

(a) Fish – Gills

(b) Human being – lungs

Question 6.

Our nostrils has hair and mucous. What is the need to have them in our nasal cavity? [HOTS]

Answer: Our nostrils possess hairs and mucous lining. These help in preventing dirt, dust and germs from entering our respiratory system.

Question 7.

Sometimes we see that farmers loosen the soil. What is the reason behind it?

Answer: The farmers sometimes loosen the soil. This helps the root to respire through the air present in the space between soil particles.

Question 8.

Various organs constitute the respiratory system of human. These organs are located according to their functions. Identify them.

Answer: The various organs in the respiratory system of human are nostrils, nasal passage, nasal cavity, windpipe and lungs.

Question 9.

The vocal ability of humans is the responsibility of an organ commonly known as voice box. What is its scientific name?

Answer: The organ that is responsible for speech is larynx or voice box. It lies between pharynx and trachea.

Question 10.

What changes are observed in diaphragm during inhalation?

Answer: During the process of inhalation diaphragm contracts and moves downwards.

Question 11.

When we exhale or breathe out, percentage of a certain gas is high. Name the gas.

Answer: The gas, carbon dioxide is in higher percentage or amount, when we exhale or breathe out.

Question 12.

In the experiment, where we exhale into lime water containing glass. What changes were observed by you?

Answer: When we exhale into lime water its colour changes, into slightly milky white because exhaled air contains CO_2 .

Question 13.

Insects have a special organ present to carry out respiration. What is that organ called?

Answer: Insects possess special organ called spiracles for respiration.

Question 14.

Name the respiratory organs in frogs.

Answer: Frogs respire through their moist skin as well as through a pair of lungs.

Question 15.

Certain small pores are present on the surface of plant through which gaseous exchange occurs. Identify these pores?

Answer: Stomata are the tiny pores that are present on the surface of plant through which gaseous exchange occurs.

Question 16.

What happens to your breathing rate when you

- (a) exercise
- (b) go to sleep

Answer: The breathing rate during exercise is increased while during sleep it goes down.

Question 17.

Floor of chest cavity refers to which organ of respiration?

Answer:Diaphragm is known as the floor of chest cavity.

Question 18.

Respiration is a continuous process. What is the need for it to be continuous rather than being like photosynthesis?

Answer:Process of respiration yields energy which is required to perform a variety of routine activities. Thus, it needs to be a continuous process.

Question 19.

A part from stomata another structure is used by plants to respire. Name that structure.

Answer:Lenticels.

Question 20.

Name the organisms which respire using anaerobic mode. Give an example of one such organism.

Answer:Anaerobes respire using anaerobic mode. Yeast is an organism respiring anaerobically.

Question 21.

Explain cellular respiration.

Answer:The process of breakdown of food in the cell with the release of energy is called cellular respiration.

Question 22.

All organisms breathe in O_2 and CO_2 . Should be less O_2 and excess of CO_2 in our environment.

Answer:The CO_2 released by us is used by plants during the process of respiration and they release O_2 as a result of this process which is used by rest of the organisms.

Question 23.

The process of fermentation is based on which principle? Answer:Anaerobic respiration.

Question 24.

When oxygen enters our body it combines with haemoglobin to form a new substance. What is that new product.

Answer:Oxyhaemoglobin.

Question 25.

Is the rate of breathing same for all the respiring organism?

Answer:No, different organisms respire at different rate because they all perform different activities at all times.

Question 26.

Which gas present in air is essential for aerobic respiration? What is the role of this gas during respiration?

Answer:Oxygen present in air is essential for aerobic respiration.

Oxygen breaks down food and releases energy during respiration.
