

Grade VII – Respiration (Science)

1. The cellular respiration process takes place in which cell organelle?
Cellular respiration takes place in the mitochondria of the cell.
2. In some animals, exchange of gases takes place through its thin and moist skin. Name one such animal.
Earthworm
3. Give the name of respiratory organs in following animals.
(a) Fish
(b) Human being
The respiratory organ of the following animals are as follows
(a) Fish – Gills
(b) Human being – lungs
4. Sometimes we see that farmers loosen the soil. What is the reason behind it?
The farmers sometimes loosen the soil. This helps the root to respire through the air present in the space between soil particles.
5. What changes are observed in diaphragm during inhalation?
During the process of inhalation diaphragm contracts and moves downwards.
6. Floor of chest cavity refers to which organ of respiration?
Diaphragm is known as the floor of chest cavity.
7. All organisms breathe in O_2 and CO_2 . Should be less O_2 and excess of CO_2 in our environment.
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.

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

9. On a very cold morning, Boojho and Paheli were talking with each other as they walked down to their school. They observed that the air coming out of their mouth looked like smoke. They were assumed and wondered how it happened. Help them to find the answer.

Answer:

On a cold day, the warm and moist air exhaled by us condenses into moist when it comes in contact with the cold air of the atmosphere, this looks like white smoke.

10. Pick the odd one out from each of the groups given below based on respiratory organs. Give reason for your answer.

(a) Cockroach, grasshopper, snail, ant

(b) Lizard, cow, earthworm, snake

(c) Crocodile, whale, dolphin, fish

(d) Snake, tadpole, crow, goat

Answer:

(a) Snail, as it does not breathe by means of trachea.

(b) Earthworm, because it breathes through its skin and it does not have lungs.

(c) Fish, as most fish breathe through their gills and do not have lungs.

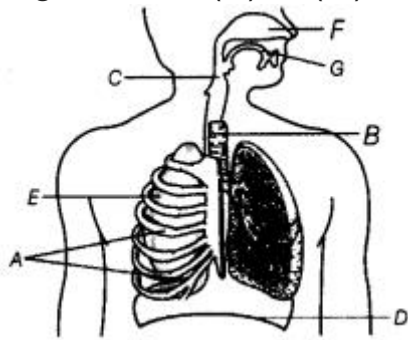
(d) Tadpole, as it breathes through gills and do not have lungs.

11. Smoking is considered harmful due to certain effects. Explain in brief.

Answer:

Lungs are very delicate organs and essential for breathing, thus keeping us alive. Smoking tobacco in the form of beedi, cigarette or cigar damages our lungs gradually and causes ill health. While smoking, smoke along with chemicals present in tobacco enters our body. These chemicals present in tobacco damages the lungs in many ways take breathing becomes difficult causes lung cancer, heart diseases, etc. Smoking also affects people around smokers as they also inhale air containing tobacco. This is called passive smoking.

12. Observe the given diagram of human respiratory system. List the organs from (A) to (G).



Answer:

The human respiratory system have following organs:

A-Ribs

B-Trachea

C-Pharynx

D-Diaphragm

E-Lungs

F-Nasal passage

G-Oral cavity

13. A girl was suffering from cold and was sneezing continuously. She joined her family at dinner and suddenly started sneezing without covering her nose, thus sending particles all over the place. On realising her mistake, said sorry and next time covered her nose.

(a) During sneezing, what are the precautionary steps to be followed?

(b) Can infections be passed from one person to another via sneezing?

(c) Is sneezing a respiration process?

(d) What values do we pick from this situation?

Answer:

(a) When sneezing, you should cover your nose so that the particles expelled by you would not be inhaled by others.

(b) Yes.

(c) No, it is process to remove/clear the particles harmful for us resulting in clean, fresh air to enter the lungs.

(d) Cleanliness and hygiene maintenance.

