

Respiration in Animals and Plants

ORAL QUESTIONS

A. Answer these questions orally.

1. What are the animals that use oxygen for respiration called?
2. What are the tiny air-sacs present in our lungs called?
3. What are the respiratory organs in insects called?
4. Are breathing and respiration similar processes?
5. Does anaerobic respiration occur in the presence or absence of oxygen?

B. Match the columns.

COLUMN A

1. Ribs move upwards
2. Ribs move downwards
3. Glucose to lactic acid and energy
4. Glucose to carbon dioxide, water and energy
5. External respiration

COLUMN B

- (a) Anaerobic respiration
- (b) Breathing
- (c) Inhalation
- (d) Exhalation
- (e) Aerobic respiration

PUZZLES/QUIZ

C. Unscramble the jumbled words to make meaningful words with the help of clues given in brackets.

1. S A N T I R O I R P E _____

(The process of taking oxygen and combining with food to release carbon dioxide and energy.)

2. D E N P W P I I _____

(The air from nasal passage reaches lungs through this.)

3. M G A A D P I H R _____

(A large muscular partition which lies between thoracic and abdominal cavities.)

4. H E R B S L I O O C N _____

(Inside the lungs, the bronchi divide and redivide into these.)

5.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| H | M | R | R | W | A | T | O | E |
|---|---|---|---|---|---|---|---|---|

(This animal breathes only through its skin.)

D. Pretend that you are alveoli. Now answer these questions.

1. What is your surface covered with?
2. When we breathe in, what do you get filled with?
3. About how many of you are present in our lungs?
4. What is your total surface area in our lungs?
5. How is this large area helpful?
6. What is your shape?

CLASS TEST

E. Very short answer questions.

1. Name the process by which transportation of gases in plants takes place.

2. How do fish and other aquatic animals obtain oxygen?

3. Name the respiratory organs of fish.

4. Do mosquitoes have lungs?

5. What is the other name for windpipe?

6. Name the products formed during aerobic respiration in humans.

F. Short answer questions.

1. What are the steps involved during respiration?

2. Why do we need to respire?

3. Differentiate between.

(a) Breathing and Respiration

| BREATHING | RESPIRATION |
|------------------|--------------------|
| | |

(b) Inhalation and Exhalation

| INHALATION | EXHALATION |
|-------------------|-------------------|
| | |

4. Write the chemical equation involved in the following.

(a) Cellular respiration

(b) Anaerobic respiration in yeast

(c) Anaerobic respiration in human muscles

5. Name all the organs of respiratory system in humans.

6. What do you understand by internal respiration?

7. How much air can a person hold in his lungs?

8. Do whales and dolphins have gills for respiration?

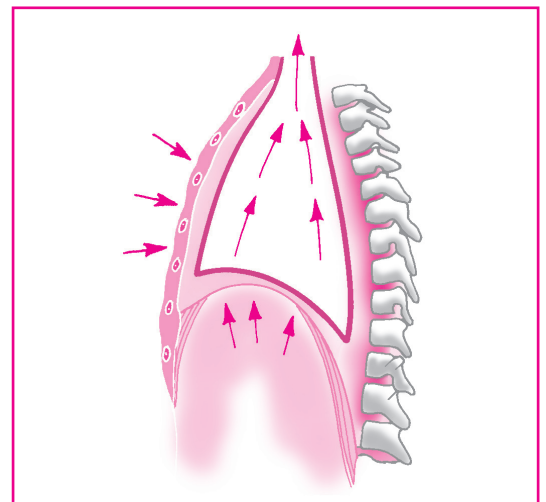
G. Long answer questions.

1. How do earthworms respire? Explain.

2. (a) Which process is shown in the figure inhalation or exhalation.

(b) Label the figure.

(c) Write the changes that occur in these structures during this process.



3. Plants do not have respiratory organs to obtain oxygen from the atmosphere. How do they respire? Explain.

HOME ASSIGNMENT

H. Think and answer.

1. An athlete breathes faster and deeper after running a race. Can you say why?

2. Reema jumbled up the sequence of the names of the organs in which the air flows in our respiratory system. Can you put them in the correct order?

Nasal passage, windpipe, pharynx, bronchioles, alveoli, bronchi, lung.

WORKSHEET

I. Give reasons for the following.

1. We get muscle cramps after heavy exercise.

2. We should always breathe through our nose and not through mouth.

3. We are advised not to sleep under a tree at night.

4. We should never sleep in a closed room with an oil lamp burning.
