

DAYANAND ANGLO VEDIC PUBLIC SCHOOL, AIROLI
(2024-25)

CLASS : VII

SUBJECT : SCIENCE

DATE:

**WORKSHEET 3 -TOPIC: ELECTRIC CHARGES AT REST,
RESPIRATION IN ORGANISMS**

Q.1.MCQs

1. Lightning conductors helps in formation of _____ from _____.
(a) nitrogen to oxygen (b) oxygen to ozone (c) Ozone to Oxygen (d) oxygen to Nitrogen.
2. Two similarly charged particles _____ each other.
(a) attract (b) repel (c) add (d) have no effect
3. An ebonite rod develops _____ charge when rubbed against flannel.
(a) positive (b) negative (c) no charge (d) both positive and negative
4. _____ helps to keep our body uncharged and saves us from electric shocks.
(a) Earthing (b) charging (c) Induction (d) conductors
5. A dry comb attracts bits of paper kept near it due to charging by
(a) induction (b) conduction (c) friction (d) earthing
6. At night _____ is taken in by plants.
a) carbon di oxide (b) oxygen (c) both oxygen and carbon di oxide (d) none of the gases
7. Aerobic means _____
a) no air (b) less air (c) in air (d) extra air
8. Anaerobic respiration in yeast produces _____
(a) CO₂ (b) O₂ (c) both a and b (d) no reaction
9. _____ is the muscular partition which between chest and abdominal cavity.
(a) ribs (b) lungs (c) diaphragm (d) abdomen

Following are Assertion reason questions.

- a. **Assertion and reason are correct and reason is the correct explanation of assertion.**
- b. **Assertion and reason both are correct but reason is not the correct explanation of assertion.**
- c. **Assertion is true and reason is false.**
- d. **Assertion is false but reason is true**
- e. **Both Assertion and reason are false.**

10. Assertion- Lactic acid production is an anaerobic respiration.

Reason- Lactic acid is produced when human muscles do not get enough oxygen to breathe.

11. Assertion- We yawn when we feel sleepy.

Reason- Our brain has cells which respire continuously.

12. Assertion: Earthing is a method in which the charged object gains more charges.

Reason: Earthing saves our body from possible electric shocks caused by faulty devices.

13. Assertion: Lightning occurs after thunder.

Reason: Lightning is caused due to Lightning conductor.

Q.2. Answer the following questions:

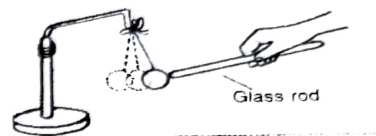


1. Identify the device shown here. Give one advantage of using this device in buildings.
2. List the precautions that need to be taken if a person is present inside a house when lightning strikes.

2. In the figure shown here,

a) Identify the method of charging.

b) What are the factors on which the charge acquired by the uncharged object depends on?



3. Why are electrical appliances earthed?

4. a. What do you mean by charging by induction?

b) To create a positively charged object to an uncharged object, which type of charged object should be brought near it?

5. How is inhalation different from exhalation?

6. a. Where are the lungs located?

b. What happens when the lungs get enlarged?

7. Name the organs of respiration in

a) Leech (b) Insects (c) Mammals

Q.3. Following are Case based questions. Read the passage and answer the questions that follow it:

1. Rasika had performed an experiment in which she observed the process of respiration in germinated gram seeds which she divided into 2 parts. One part A was boiled and other part B was kept raw. Both of them were kept in conical flasks.

- a. Which of the two would show an increase in temperature? Why?
- b. Write the equation to represent the process of respiration in plants.
- c. What happens to the rate of respiration and photosynthesis in plants during dark conditions?
- d. Represent the process of respiration using an equation.

2. Thunder and lightning are a very common phenomena observed in rainy season. It is caused due to the accumulation of charges in nature which cause this phenomena and are useful part of nature.

- a. What causes lightning?
- b. What happens when lightning strikes tall trees ?
- c. How can we protect multi storeyed buildings from the adverse effects of lightning?
- d. Give any two ways to describe the importance of lightning in nature.

D.A V PUBLIC SCHOOL, AIROLI
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WORKSHEET **DATE:**
NUTRITION IN PLANTS, NUTRITION IN ANIMALS

Q1. CHOOSE THE CORRECT OPTIONS:

1. Which among the following is a parasitic plant?
a. Mango tree b. Cuscuta c. Guava d. Pitcher plant
2. Lichens are the symbiotic relationship between _____ and _____.
a. Bacteria and fungi b. Air and soil c. fungus and algae d. algae and bacteria
3. This gas cannot be directly used by plants and hence converted to simple form during the process of photosynthesis.
a. Carbondioxide b. Oxygen c. Nitrogen d. Hydrogen
4. The long, tubular beak of the humming bird helps it to suck _____.
a. Food b. insects c. air d. nectar
5. Enamel, the hardest substance in our body is made of
a. Magnesium b. Calcium c. Keratin d. all the above
6. Which of these glands help in digestion?
a. Liver b. Pancreas c. Oesophagus d. Both a and b

Q.2. Following are the Assertion-reason type questions. Read and answer accordingly:

- a. Both assertion and reason are correct and reason is the correct explanation of assertion
- b. Both assertion and reason are correct but reason is not the correct explanation of assertion
- c. Assertion is true and reason is false
- d. Assertion is false and reason is true

1. Assertion : Amoeba is unicellular organism.

Reason: It lives in dry soil.

2. Assertion: Stomach is a J shaped organ of alimentary canal.

Reason- It contains mucus which protects inner lining of stomach

3. Assertion- Roundworms are parasites.

Reason- They obtain food from another living organism.

4. Assertion- Leaves have colour other than green due to chlorophyll.

Reason- Chlorophyll is present in all green plants.

Q.3. Answer the following questions:

1. Give two examples for each of the following:
a. Autotrophs
b Saprophytes
c Leguminous plants

2. Observe the following figures. Write their names and their type of nutrition.



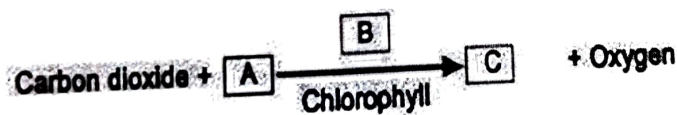
3. Give one word answer:

- Dark green to yellowish brown, watery fluid produced by liver.
- The first chamber of the ruminant's digestive system.
- A unique process by which green plants manufacture their food.
- Ultimate source of energy.

4. Name the part of the alimentary canal where

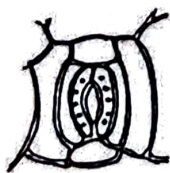
- water gets absorbed from undigested food.
- digested food gets absorbed.
- taste of the food is perceived.
- bile juice is produced.

5. Write the complete words for A,B ,C



6. Write one use of

a.



Stomata

b.



Root

7. Amoeba is a microscopic single celled organism, which is found in pond water. It is very simple animal. Amoeba has a cell membrane, and its shape is not fixed, i.e. it constantly changes its shape and position. The body of Amoeba has finger-like projections, called pseudopodia or false feet.

- Why is amoeba called a microscopic organism ?
- What is the function of pseudopodia?
- Where are the digestive juices secreted in amoeba?