

JASWANT MODERN SR. SEC. SCHOOL SCIENCE WORKSHEET A CLASS-VIII

Q. Multiple choice questions

1. Movement of substances in and out of the cell is controlled by
(a) cytoplasm (b) nuclear membrane (c) cell wall (d) cell membrane
2. Part of the cell that contains hereditary information
(a) nucleus (b) cytoplasm (c) plastids (d) vacuoles
3. Which of the following is an example of rechargeable batteries
(a) dry cell (b) lithium battery (c) voltaic cell (d) coin cell
4. The interparticle force is weakest in
(a) solid (b) liquid (c) gas (d) none of these
5. Which of the following increase the heating effect in a wire
(a) Short wire (b) less current (c) high resistance (d) thick wire

Q. Fill in the blanks

1. _____ is known as the father of microbiology.
2. Chromosome carry _____ that are responsible for the transmission of hereditary information.
3. Vacuoles provides _____ and rigidity to the plant cell.
4. _____ is responsible for the ribosome production in a cell.
5. The spaces between the particles of the matter are called _____.
6. The strength of an electromagnet _____ with the number of turns of the wire.
7. _____ state of matter possess the least interparticle space.
8. The thermal energy of the particles _____ with decrease in temperature.
9. _____ bacteria is used to increase the soil fertility.
10. The electrolyte in the dry cell is in the form of _____

Q. Give reasons for the following.

1. Electric fuse is used in an electric circuit.
2. A plant kept in darkness for several days becomes weak and pale.
3. Nucleus is considered as the control center of the cell.
4. Maglev trains are able to achieve high speeds.
5. Nerve cells are extremely long and branched.
6. Nichrome wire is used as heating elements in devices.

Q. Answer the following questions.

1. Why are microorganisms considered essential for life on the earth? Give examples.
2. Why are preservatives added to the packaged food? Give some examples of preservatives.
3. What is bacterium? Explain with the help of well-labelled diagram.
4. What is an electromagnetism? What are the factors on which it depends?
5. What is cell? When and how it was discovered?
6. What do you mean by states of matter? What are the different states of matter? Give examples.
7. Describe an activity to show that we can make an electric cell using lemons with the help of a well labelled diagram.
8. Why do microorganisms grow rapidly in moist conditions?
9. What are antibiotics? What is mechanism of antibiotics?
10. What is voltaic cell? Explain the working of an cell with the help of a well labelled diagram.
11. What is nucleus? What are the different parts of the nucleus? Explain with the help of the diagram.
12. Write the characteristics of microorganisms? Where do they live?
13. What are plastids? What are the different types of the plastids? Explain.
14. What is fermentation? Give examples.

Q. Answer the following questions.

1. What are viruses? Why are viruses not considered to be living and non- living?
2. What is electromagnetism? When and how it was discovered?
3. What is dry cell? What are the different components of the dry cell? Explain with diagram.
4. Describe an activity to show that gases spread to fill the entire space available?
5. What do mean by heating effect? Why heating element of heating devices are made up of nichrome?
6. What is spirulina? Why is it called spirulina?
7. What would happen if we reversed the direction of the current in an electromagnet?
8. What are the factors on which the amount of heat produced in a heating devices depend?
9. Describe an activity to show that particles of matter are constantly moving in nature with the help of the diagram.
10. What do you mean by thermal energy? What is the relationship between thermal energy and matter?
11. Write the characteristics of solid, liquid and gases. (write 6-6 characteristics of each state)
12. Describe the activity to show that gases are more compressible than liquids with the help of diagram.
13. What is electromagnet? Write the uses of electromagnet.
14. What are the characteristics of paramecium? Explain with the help of a well- labelled diagram.
15. What do you mean by level of organization? Explain with the help of the diagram.

Q. Differentiate between

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| 1. Prokaryotic and Eukaryotic cell | 2. Nucleus and Nucleolus |
| 3. Solid and Liquid | 4. Chromoplast and Chloroplast |
| 5. Voltaic cell and Dry cell | 6. Primary cell and Secondary cell |
| 7. Animal cell and Plant cell | 8. Cell wall and Cell membrane |

Q. Write short notes on:

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|------------------|------------------------|---------------------------|
| 1. Vacuoles | 2. chromatin material | 3. Chlamydomonas |
| 4. Electric cell | 5. Interparticle force | 6. Lithium- ion batteries |
| 7. Matter | 8. Thermal energy | 9. Antibiotics |
| 10. diffusion | | |

NOTE- EVERY STUDENT HAS TO MAKE A SCIENCE WORKING MODEL AND DO THE FOLLOWING PROJECT.

Roll no. 1-12:

DISEASES CAUSED BY MICROORGANISM – Prepare a project file on communicable diseases caused by bacteria, viruses, fungi and protozoa. Write symptoms, mode of transmission and preventive methods. Paste pictures related to that disease.

Roll no. 13-24

TYPES OF ELECTRICAL APPLIANCES – Prepare a project file on common household electrical appliances. Classify them on the basis of their uses and power consumption. Mention appliances that save electricity and write ways to conserve electrical energy at home.

Roll no. 25- 40:

FOOD PRESERVATION TECHNIQUES - Write about different methods of food preservation and use of preservatives. Mention the role of microorganisms in spoilage of that particular food and paste pictures of preserved food items.