

Class 9 Science – Worksheet 1

Chemistry: Matter in Our Surroundings

1 Mark Questions

1. Define latent heat of fusion.
2. Name the process in which a liquid changes into vapour without heating.
3. Write the SI unit of pressure.

2 Mark Questions

4. Why do we feel cool when we pour some acetone or perfume on our palm? (Give reason)
5. State any 4 differences between evaporation and boiling.
6. Why do solids have a definite shape and volume?

3 Mark Questions

7. Explain why:

a) It is difficult to cook rice at high altitudes.

b) Ice floats on water.

c) Gas exerts pressure on the walls of the container.

d) Archit dropped a Crystal of potassium permanganate into two beakers A & B containing hot water and cold water respectively. After keeping the beakers undisturbed for some time, what did he observe and why?

8. List three factors which affect the rate of evaporation. Explain briefly.

5 Mark Questions (Including HOT/Analysing)

9. "a) A desert cooler works better on a dry day." Explain scientifically with reasons.

b) Why are gases highly compressible as compared to solids and liquids?

Which gas is used as a fuel in vehicles these days .?

10. Analyse the interconversion of states of matter with the help of a labelled diagram.

11. A closed vessel contains three states of matter. Compare the following properties of solids, liquids, and gases:

a)Shape b)Volume. . c)Compressibility. d)Diffusion. e)Kinetic energy

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Biology: The Fundamental Unit of Life

1 Mark Questions

1. Who discovered the cell?
2. Which organelle is called suicide bags of the cell .Why?
3. Name the cell organelle responsible for photosynthesis.

2 Mark Questions

4. Give one reason: a)Why does a raisin swell up when kept in water?

b)Archit dropped a Crystal of potassium permanganate into two beakers A & B containing hot water and cold water respectively. After keeping the beakers undisturbed for sometime, what did he observe and why?
5. Differentiate between prokaryotic and eukaryotic cells (any two points).

6. State two functions of a) mitochondria. b) Plastids

3 Mark Questions

7. Explain the role of nucleus in a cell.

8. Describe the functions of endoplasmic reticulum. Distinguish between RER and SER.

9. What will happen to a plant cell if it is kept in:

a) Hypotonic solution

b) Hypertonic solution

Explain with daily life examples

5 Mark Questions

10..“Plasma membrane is essential for cell survival.” Justify the statement with suitable examples.

11. Analyse the functions of the following cell organelles and explain how they work together:

- a)Mitochondria. b)Ribosomes. c)Golgi apparatus
d)Lysosomes. e)Vacuole

12. Draw a neat labelled diagram of an animal cell and explain the function of four major organelles.