

HOLIDAY HOMEWORK

CLASS IX

SCIENCE

SESSION 2023-24

(A.) Matter in our surrounding:

1. Tabulate the differences in the characteristics of the three states of matter. Comment upon the following: Rigidity, Compressibility, Fluidity, Filling a container, Shape, Kinetic energy and Density.
2. For any substance, why does the temperature remain constant during the change of state?
3. Convert the following temperatures to the Celsius scale: a) 293 K b) 470 K.
4. Give reasons for the following observations:
 - a) Naphthalene balls disappear with time without leaving any solid.
 - b) We can get the smell of perfume sitting several meters away.
5. Give two reasons to justify:
 - a) Water at room temperature is a liquid.
 - b) An iron almirah is a solid at room temperature.
6. Why is ice at 273 K more effective in cooling than water at the same temperature?

The Fundamental unit of life:

1. Who discovered cell and how?
2. Why is the cell called the structural and functional unit of life??
3. Why is plasma membrane called a selectively permeable membrane?
4. Can you name the two organelles we have studied that contain their own genetic material?
5. What happens to an animal cell when it is placed in a very dilute external medium? Why?
6. Draw and label a) Plant cell and b) Animal cell.
7. Write functions of the following:
 - a) Mitochondria,
 - b) Golgi bodies,
 - c) Plastids,
 - d) Centrosome,
 - e) ER,
 - f) Ribosomes,
 - g) Lysosomes,
 - h) Cytoplasm.

(B) PROJECT WORK:

Biography of eminent scientists in the field of a) Physics, b) Chemistry, and c) Biology and their contribution in their field (three from each field).

(C) ART INTEGRATED PROJECT: STATE -TAMILNADU

- (D) MDP:** i) Write in detail Agricultural tools used in Tamilnadu
ii) Organic Farming in Tamilnadu