

LESSON PLAN
CLASS : IX
SUBJECT : CHEMISTRY
TOPIC : MATTER IN OUR SURROUNDINGS

UNSGD

My topic is fulfilling goals of sustainable development like : **Goal 4** – Quality education and **Goal 7** – Affordable and clean energy.

(**KPI-1** - To improve the observational and evaluation skills in student by relating the content with day to day examples and to develop interest in experimentations and finding inference from them.

KPI-2- To improve the understanding of the concept and develop analytical skills in students

Objectives :

Specific objectives : To enable the students to :

- Understand the concept of matter and its properties.(**knowledge**)
- Compare the general properties of solids, liquids and gases.(**Analysing**)
- Convert temperature on different scales.(**Application**)
- Understand the interconversion of various states of matter.(**knowledge**)
- Learn new terms and their meanings like latent heat, sublimation, rigidity, compressibility etc
- Analyse various daily life examples and relate them with the concept of evaporation.(**analyse and Application**)
- Differentiate between evaporation and boiling.(**analyse**)

Behavioural objective:

- To enable the students to develop observational skills and analytical skills.
- To enable the students to develop reading habits .
- To enhance the calculation skills of problem.

Processes/activities :

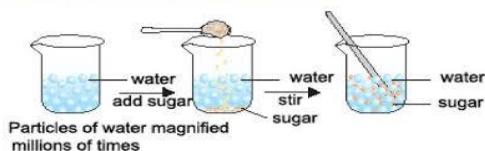
➤ **Demonstrate the examples of matter and explain its definition.**

2) Physical nature of matter :-

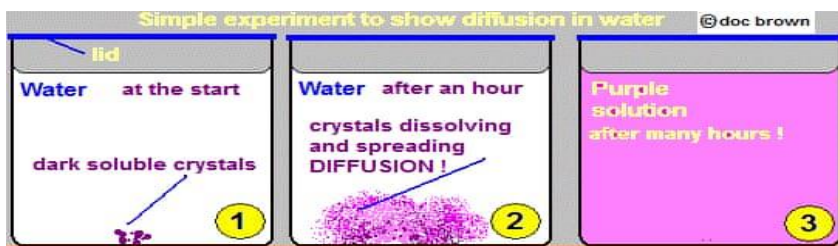
- i) Matter is made up of particles.
- ii) The particles of matter are very tiny.
- iii) The particles of matter have space between them.
- iii) The particles of matter are continuously moving.
- iv) The particles of matter attract each other.

a) Matter is made up particles :-

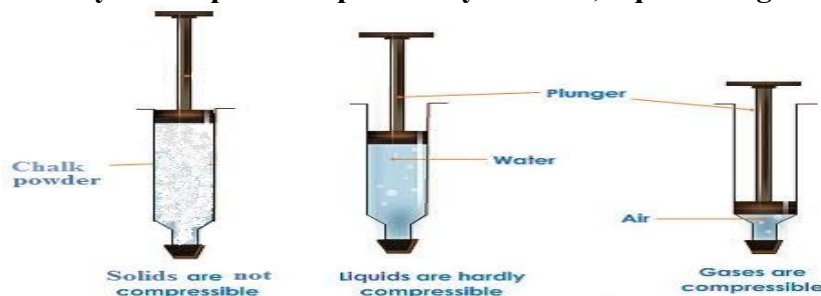
Activity :- Take some water in a beaker and note its level. Dissolve some salt or sugar in it with the help of a glass rod. The salt dissolves in the water but the level of water does not change. This is because the particles of water get into the space between the particles of water. This shows that matter is made up of particles.



➤ **Perform small activities as given in NCERT to explain various properties of matter.**



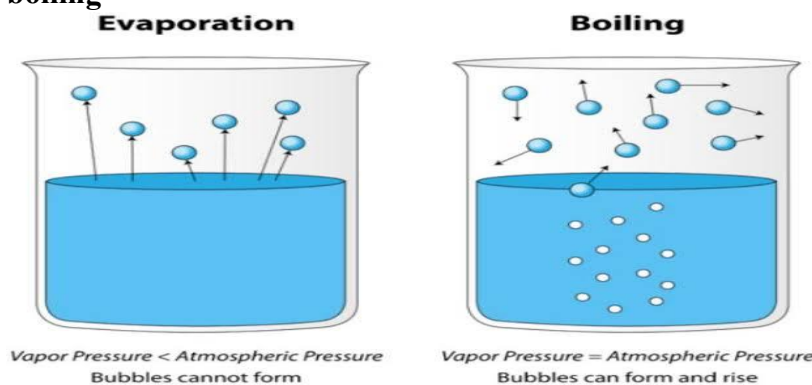
➤ Activity to compare compressibility of solid, liquid and gas



➤ Pointwise explanation on board and dictating the main points.

➤ Lecture method

➤ Explanation of the topic with the help of diagram For eg- Comparison of evaporation and boiling



➤ Discussion of various problems and case studies.

➤ Laboratory demonstration of various chemical changes and reactions.

➤ Motivate peer learning.

➤ Make a comparison chart of solid, liquid and gas.

➤ Providing summary of chapter in the form of concept map.

➤ Demonstrate the process of boiling and melting.

Assessment :

- Worksheets (Application based questions)
- Exercise of NCERT and exemplar will be discussed.
- MCQ sheets for practice
- Class test after completing the chapter
- Informal assessment in the class by recapitulation.
- Lab activities of various chemical reactions
- Example of source based question-

In which of the following figure rate of evaporation is more. Give reason also.

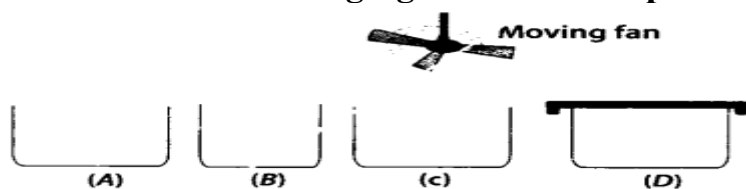


Fig. 1.3

Digital content to be used –

<https://youtu.be/EhLCUqL0EEE>

Expected Learning outcome :

Students will be able to :

- Understand that everything that they see around is a form of matter.
- Explain properties of matter with the help of activities.
- Learn various new key words of science .
- Differentiate between the properties of solid, liquid and gases , between evaporation and boiling.
- Analyse various day to day examples with the concept of evaporation.
- Understand the process of boiling and melting.
