

Chapter 1

Matter

LESSON PLAN

SPECIFIC OBJECTIVES

Students must learn about

- ❖ Introduction of matter, its definition, i.e., meaning and examples
- ❖ composition of matter
- ❖ characteristics of matter particles
- ❖ states of matter
- ❖ characteristics of solids, liquids and gases
- ❖ distinction between solids, liquids and gases

Teaching Aids

Pictures/models based on matter and its states found in our surroundings; a chart showing distinction between solids, liquids and gases.

Teaching Strategy

- ❖ The teacher should ask the students to study matter found in our surroundings. He/She should ask the students to study matter and its meaning.
- ❖ The teacher should ask the students to perform activity 1 showing that the matter occupies space given at page 9. He/She should also ask the students to perform activities 2, 3 and 4 given at page 10.
- ❖ Students should be encouraged to study composition of matter and activity 5 showing that matter is made up of tiny particles given at page 11. They should be encouraged to study question-answer related to *anu* or *parmanu* given at page 11.
- ❖ Students should be encouraged to study characteristics of matter particles and activity 6 showing that molecules are in a state of motion given at page 12. They should also be asked to study question-answer and something more (definition of cohesive and adhesive force) given at page 12.

- ❖ Students should be encouraged to solve check point 1 given at page 12.
- ❖ The teacher should ask the students to study states of matter, i.e., solids, liquids and gases, and their characteristics. He/She should ask the students to study question-answer given at page 13. He/She should also ask the students to perform activity 7 showing that gases are compressible but liquids and solids are noncompressible given at page 14.
- ❖ Students should be encouraged to study something more given at pages 14–15. They should also be asked to learn Table 1.1 showing distinction between solids, liquids and gases.
- ❖ The teacher should ask the students to solve check point 1 given at page 15.
- ❖ The teacher should ask the students to recap the whole chapter using wrapping it up and know these terms. He/She should also ask the students to answer the questions of test yourself and discuss the think zone given in it.

Boost UP

- ❖ The teacher should ask each student one-by-one of the class to tell the definition of matter and its composition, i.e., atoms and molecules.
- ❖ Students should be asked to answer the questions related to characteristics of matter. They should also be asked to identify solids, liquids and gases based on their characteristics.
- ❖ Students should also be asked to tell the differences between solids, liquids and gases, and discuss about them.

Expected Learning Outcomes

Students must be able to know the

- ❖ matter and its meaning.
- ❖ composition of matter.
- ❖ characteristics of matter particles.
- ❖ states of matter and their characteristics in detail.
- ❖ distinction between solids, liquids and gases.

Evaluative Questions

The teacher should ask the following questions to evaluate the students.

1. Name the substance which has mass and occupies space.
2. Define molecule.
3. What is called the space between matter particles or molecules?
4. Name the state of matter which has a definite shape and fixed volume.
5. Which state of matter are nonrigid and can be compressed easily?
6. Can liquids flow?
7. Which has more intermolecular force, solids or liquids?
8. Define fluids.