

DR. R. N. INTERNATIONAL SCHOOL

UNDER THE AGIS OF S. S. SITARAMSINGH EDUCATIONAL AND CHARITABLE TRUST
MOHANPUR, SITAMARHI- 843302

Chapter 10: States of Matter

1. Word Meanings (शब्दार्थ)

S.No.	English Word	Hindi Meaning
1	Matter	पदार्थ
2	Solid	ठोस
3	Liquid	द्रव / तरल
4	Gas	गैस
5	Definite	निश्चित
6	Shape	आकार
7	Volume	आयतन
8	Properties	गुण
9	Compress	दबाना
10	Container	बर्तन / पात्र
11	Melting	पिघलना
12	Freezing	जमना
13	Boiling	उबलना
14	Condensation	संघनन
15	Sublimation	ऊर्ध्वपातन
16	Temperature	तापमान

2. Exercises

A. Tick (✓) the correct option:

1. What is matter?

- a) Anything that takes up space and has weight ✓ (Correct)
- b) Only things that are solid
- c) Anything that can be seen
- d) Only liquids and gases

2. Which of the following is an example of a solid?

- a) Water
- b) Milk
- c) Rock ✓ (Correct)
- d) Helium

3. Which state of matter has a definite volume but no definite shape?

- a) Solid
- b) Liquid ✓ (Correct)
- c) Gas
- d) Plasma

4. Which property is true about gases?

- a) They have a definite shape.
- b) They have a definite volume.
- c) They are easily compressible. ✓ (Correct)
- d) They cannot fill a container.

5. What is the process called when a liquid turns into a gas?

- a) Freezing
- b) Melting
- c) Boiling ✓ (Correct)
- d) Condensation

B. Fill in the blanks:

1. Matter exists in three main states: solids, liquids and gas.
2. Solids have a definite shape and volume.
3. Liquids take the shape of the container they are in.
4. Gases can be compressed into a smaller space.
5. When water is heated, it turns into steam or water vapour.

C. Name the following:

1. The process in which a solid turns into a liquid — **Melting**
2. The state of matter that spreads out to fill the entire space available — **Gas / Gases**
3. The process where a solid directly changes into a gas — **Sublimation**
4. The process where a gas turns into a liquid — **Condensation**
5. The state of matter with a definite shape and volume — **Solid**

D. Answer the following questions:

Q1. What are the unique properties of solids?

Ans: Solids have a fixed shape and a fixed volume. They cannot be compressed easily.

Q2. How does the volume of a liquid differ from that of a gas?

Ans: Liquids have a fixed volume, but gases do not have a fixed volume.

Q3. Describe an activity to demonstrate that liquids take the shape of their container.

Ans: Pour some water from a glass into a bowl. The water takes the shape of the bowl, proving that liquids take the shape of the container they are kept in.

Q4. What happens during the sublimation process?

Ans: It is the process where a solid changes directly into a gas without turning into a liquid first (e.g., camphor, dry ice).

Q5. Explain why gases are easily compressible compared to solids and liquids.

Ans: Gases have large empty spaces between their particles, so they can easily be pressed together (compressed).