

# MATTER

## CHAPTER NO.1 SUB: PHYSICS

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CHANGING YOUR TOMORROW

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# LEARNING OUTCOMES

- **Students will be able to :**
- Demonstrate matter in three states
- Distinguish the three states of matter in terms of movement of particles.
- Relate the three states of matter with energy of movement of particles in them.

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CHANGING YOUR TOMORROW

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## POINTS TO BE COVERED

- Matter
- Characteristics of molecules
- States of matter.

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# INTRODUCTION



# INTRODUCTION

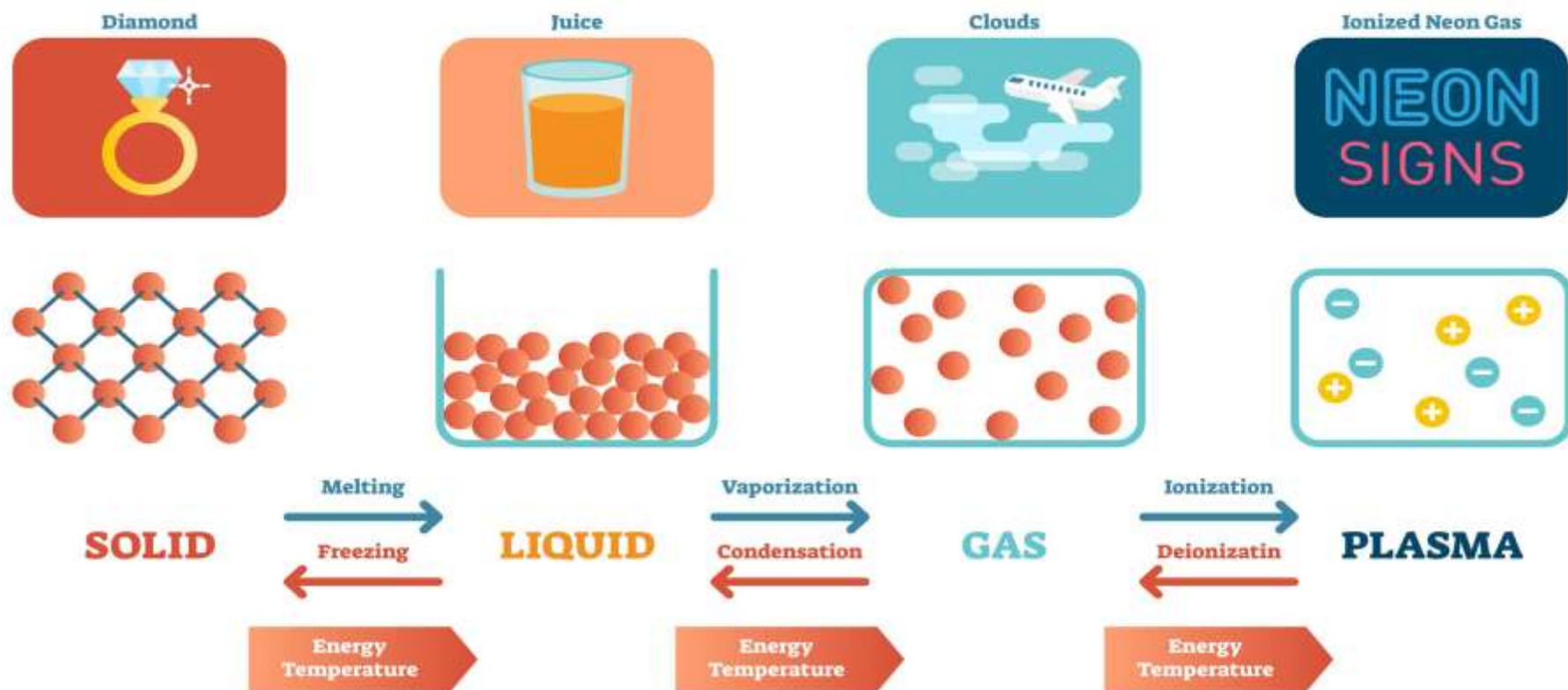
Matter is something which

- occupies space
- has mass
- and can be perceived by our senses.

Composition:

- In the past, Indian philosophers considered that matter was made up of five tatvas: Akash, Vayu, Agni, Jal, Prithvi.
- Maharshi Kanada considered : Matter is made up of tiny particles called molecules.

# States of Matter



# COMPOSITION OF MATTER

- <https://youtu.be/FxS-pzysJJA>

# CHARACTERISTICS OF MOLECULES

- Small size
- They have spaces between them.
- They are in constant motion.
- They attract each other.



# STATES OF MATTER

## Three States of Matter



### Solid

- Particles in a solid are tightly packed together in a regular pattern.
- Particles in a solid will vibrate but cannot move past each other.
- Solids retain their shape.



### Liquid

- Particles in a liquid are close together with no regular pattern.
- Particles in a liquid flow and can easily move in their own spaces.
- Liquids assume the shape of their containers.



### Gas

- Particles in a gas are well separated with no regular pattern.
- Particles in a gas vibrate freely at high speeds.
- Gases assume the shape of their containers.



[https://youtu.be/o2qM4o8e\\_Vo](https://youtu.be/o2qM4o8e_Vo)

# STATES OF MATTER

- Explain the three states of matter.
- [https://youtu.be/o2qM4o8e\\_Vo](https://youtu.be/o2qM4o8e_Vo)

# HOME ASSIGNMENT

- Define the term matter. What is it composed of?
- State three properties of molecules of matter.
- What do you mean by inter molecular spaces?
- How do they vary in different states of matter?

**THANKING YOU**  
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