

MATTER

CHAPTER NO.1 SUB: PHYSICS

CHANGING YOUR TOMORROW

LEARNING OUTCOMES

- **Students will be able to :**
 - Explain the concept of evaporation.
 - Explain how the temperature influences the rate of evaporation.

CHANGING YOUR TOMORROW

POINTS TO BE COVERED

- Rate of evaporation
- Applications of evaporation.

CHANGING YOUR TOMORROW

INTRODUCTION

- Discuss the three states of matter solid, liquid and gas on the basis of molecular model.
- Define evaporation.
- Explain the terms melting and melting point.
- A liquid can change into vapour state at a fixed temperature and at all temperatures. Name the processes involved in it.

EVAPORATION

- Explain evaporation by showing a video.
- <https://youtu.be/e27UguK78C4>

EVAPORATION

- <https://youtu.be/SfzUBe7lp44>
- <https://youtu.be/k9l0s5zVibo>
- <https://youtu.be/e27UguK78C4>

Evaporation

- **EVAPORATION:** Is a process in which a liquid changes into vapour at all temperatures from the surface of a liquid.
- Rate of evaporation:

Rate of evaporation depends on the following five factors.

1. The temperature of liquid
2. The area of the exposed surface.
3. The nature of liquid.
4. The flow of air above the liquid.
5. The presence of moisture or liquid.

RATE OF EVAPORATION

- The rate of evaporation of a liquid depends on the following factors.
 1. The temperature of liquid
 2. The area of the exposed surface.
 3. The nature of liquid.
 4. The flow of air above the liquid.
 5. The presence of moisture or liquid.

APPLICATION OF EVAPORATION

- In summer water gets cooled in the earthen pot.
- Putting wet cloth on the forehead of a patient having high fever.
- Helps to maintain the body temperature.

EVAPORATION AND BOILING

Answer:

Boiling	Evaporation
1. Occurs at a fixed temperature	1. Occurs at any temperature
2. Quick process	2. Slow process
3. Takes place throughout the liquid	3. Takes place only at the liquid surface
4. Bubbles are formed in the liquid	4. No bubbles are formed in the liquid
5. Temperature remains constant	5. Temperature may change
6. Thermal energy supplied by an energy source	6. Thermal energy supplied by the surroundings

HOME ASSIGNMENT

- Exercise: B-17,18,19,20

THANKING YOU
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