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MATTER IN OUR SURROUNDING

SUBJECT-CHEMISTRY

CHAPTER NO-01

CHAPTER NAME-MATTER IN OUR SURROUNDING

PERIOD-7

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LEARNING OBJECTIVE

- Students will be able to
- Familiarise with the concept of evaporation.
- Get aware of the factors affecting the rate of evaporation.

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EVAPORATION AND ITS FACTORS

- EVAPORATION IS DEFINED AS THE CHANGE OF LIQUID TO THE VAPOUR STATE AT ANY TEMPERATURE BELOW ITS BOILING POINT.
- FACTORS AFFECTING EVAPORATION ARE-------
- 1) TEMPERATURE
- 2) SURFACE AREA
- 3) HUMIDITY
- 4) SPEED OF WIND
- 5) NATURE OF LIQUID

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EVAPORATION CAUSES COOLING

- EVAPORATION IS A SURFACE PHENOMENA IN WHICH A LOT OF ENERGY IS LOST.
- ENERGY IS NEEDED TO OVERCOME THE ATTRACTIVE FORCES AMONG THE LIQUID MOLECULES SO THAT THEY MAY CHANGE TO THE VAPOURS.
- THIS REQUIRED ENERGY IS ABSORBED FROM THE SURROUNDING AND THUS THE TEMPERATUR LOWERS DOWN AND BECOMES COOL.
- SOME OF THE APPLICATION OF COOLING EFFECT OF EVAPORATION ARE:——

1) WE FEEL COOL WHEN SITTING UNDER FAN.
2) WE SPRINKLE WATER ON THE ROOF DURING SUMMER EVENING.
3) WATER REMAIN COOL IN THE EARTHEN POT.

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DIFFERENCE BETWEEN BOILING AND EVAPORATION

- BOILING OCCURS AT 100 DEGREE CELSIUS BUT EVAPORATION AT ALL TEMPERATURE.
- BOILING IS A BULK PHENOMENA WHEREAS EVAPORATION IS A SURFACE PHENOMENA.
- BOILING DOES NOT CAUSES COOLING BUT EVAPORATION CAUSES.
- BOILING IS NOT AFFECTED BY THE PHYSICAL CONDITION BUT EVAPORATION IS INFLUENCED BY THE PHYSICAL CONDITIONS.

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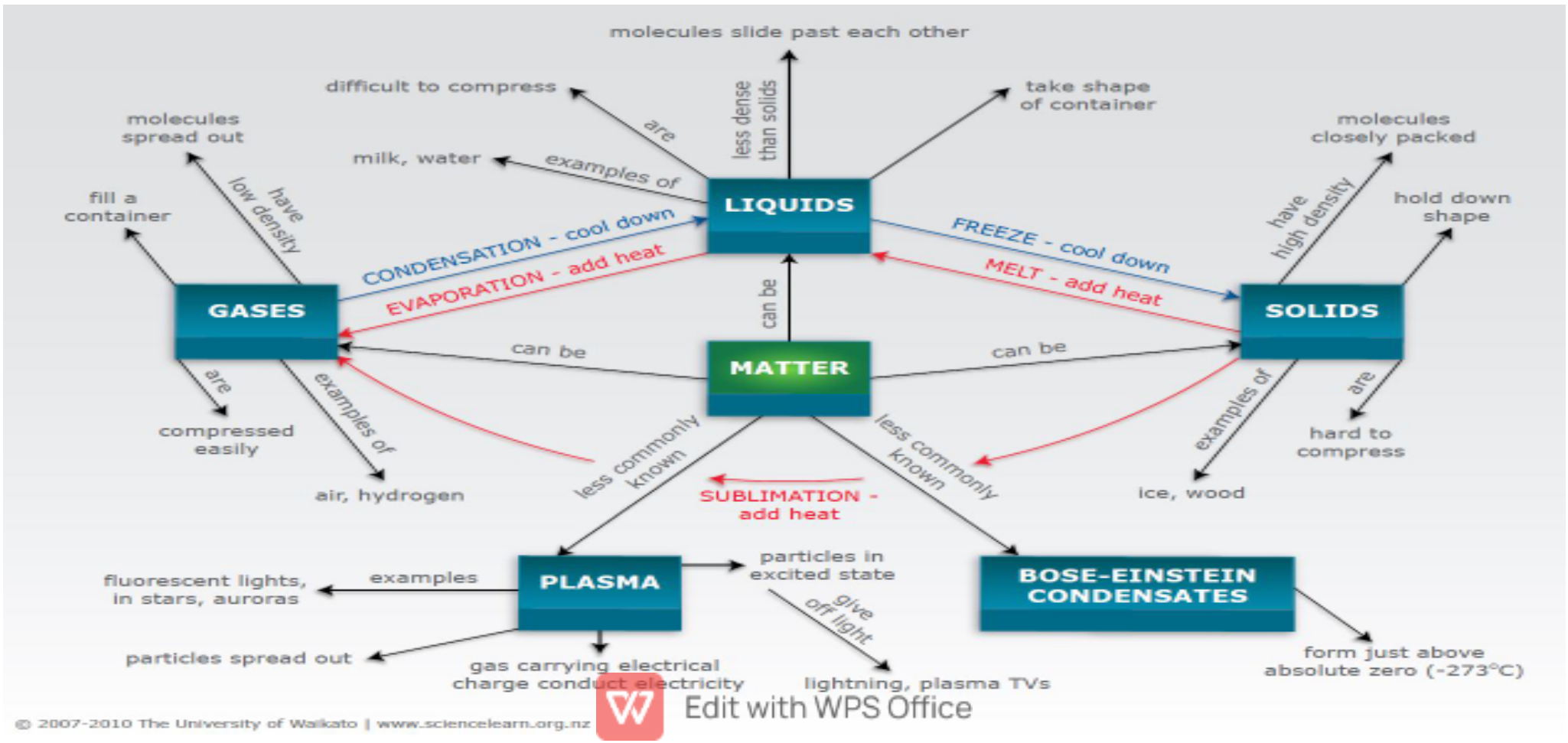
SUMMARY OF THE CHAPTER



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HOME ASSIGNMENT

- EXPLAIN HOW DOES EVAPORATION CAUSES COOLING
- EXPLAIN THE FACTORS AFFECTING THE RATE OF EVAPORATION.

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THANKING YOU

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