

## Chapter-12 (The Sun and the Weather)

### # New words :

1. Weather
2. breeze
3. evaporation
4. condensation
5. precipitation
6. hail
7. humidity
8. fog
9. dew
10. frost

### # Define the following :

1. Evaporation - The process of changing of water into water vapour due to heating is called evaporation.

2. Condensation - The process of changing of water vapour into water due to cooling is called condensation.

3. Humidity - Amount of water vapour present in air is called humidity.

④ Water Cycle - The continuous process of evaporation and condensation <sup>and precipitation</sup> of water in the environment is known as water cycle.

5. Weather - The condition of atmosphere at a particular time and place is known as weather.

6. Precipitation - Any form of water that falls from the sky to the Earth's surface is known as precipitation, such as rain, snow and hail etc.

QA - Give one difference between -

1) Sea breeze

In coastal areas, during the day time wind blows from sea to land. This is called sea breeze.

Land breeze

In coastal areas, during the night time, wind blows from land to sea. This is called land breeze.

2) Fog

When the clouds form very close to the ground, it is called fog.

cloud

Clouds are formed when the water vapour in the air cools and turns into water droplets.

3) Rain

When the drops of water in clouds get too heavy to hang in air, they fall as rain.

Dew

On a cold night, the water vapour in the air condenses into drops of water. These drops of water is called dew.

#### 4) Frost

When it is extremely cold, the water on the surface of anything freezes. This is called frost.

#### Snow

When the water vapour passes through very cold air, it freezes into snowflakes. When these snowflakes fall, snowfall takes place.

#### 5) Snowflakes

When the water vapour passes through very cold air, it freezes into snowflakes. When these snowflakes fall, snowfall takes place.

#### hail

When raindrops are falling, sometimes they pass through a very cold region in the atmosphere. There they freeze and fall as hailstones.

Q.B: Give reason for the following—

1) Clothes dry faster on a sunny day.

Ans- Because water evaporates faster in a warm sunny day. So the heat from the sun causes water to evaporate quickly from clothes.

2) Coastal areas have a pleasant weather in daytime.

Ans - Because in daytime the cool air from the sea moves towards the land. Due to this cooling effect of the sea breeze, these areas have a pleasant weather in daytime.

3) Winters are cold.

Ans - The part away from the Sun has winter. It gets less sunlight for a shorter time. So winters are cold.

4) Days are longer in summer than in winters.

Ans - The part of the Earth that has summer is closer to the Sun. So it gets more sunlight for a longer time.

5) Humidity is uncomfortable for people.

Ans - Because it slows down the evaporation of sweat from the skin and making it harder for the body to cool down and causing a sticky warm feeling.

5) It is difficult to dry clothes ~~on~~ on a rainy day.

Ans- Because during rainy day, the air is humid and no sunlight causing slow down the evaporation of water from clothes.

Q0 - Answer the following questions -

Q1. How does the Sun cause changes in the weather? Give three points in brief.

Ans- The Sun causes changes in the weather in the following ways -

1. Difference in day and night.
2. Difference in morning, evening and noon.
3. Difference in summers and winters.

Q2. How are clouds formed?

Ans- The Sun makes the water evaporate and rises into the air. At higher level, the air is ~~not~~ very cold, so, the water vapour condenses into tiny drops of water and clouds are formed.

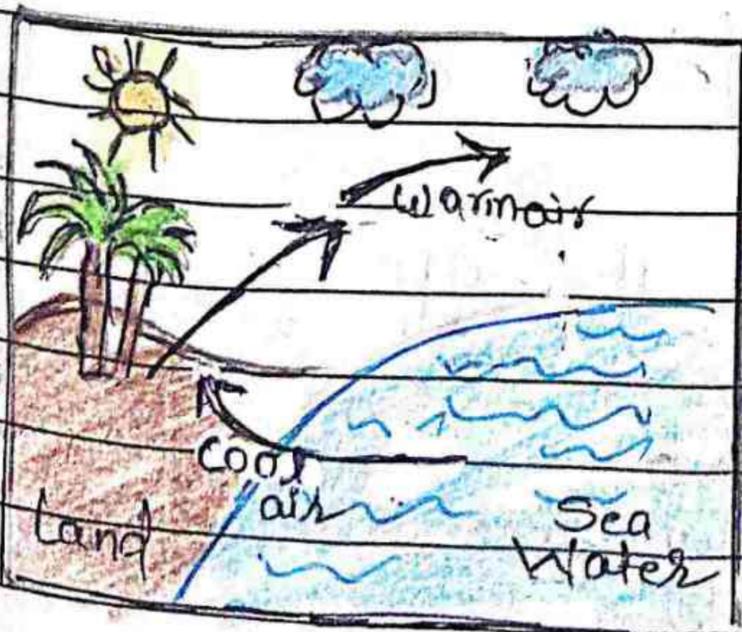
Q3. How are breezes set up? Explain and draw the diagram.

Ans - Breezes occur when air moves from one area to other. As air warms, it rises up from a given surface. The cooler air will move into the warmer place to replace the rising air.

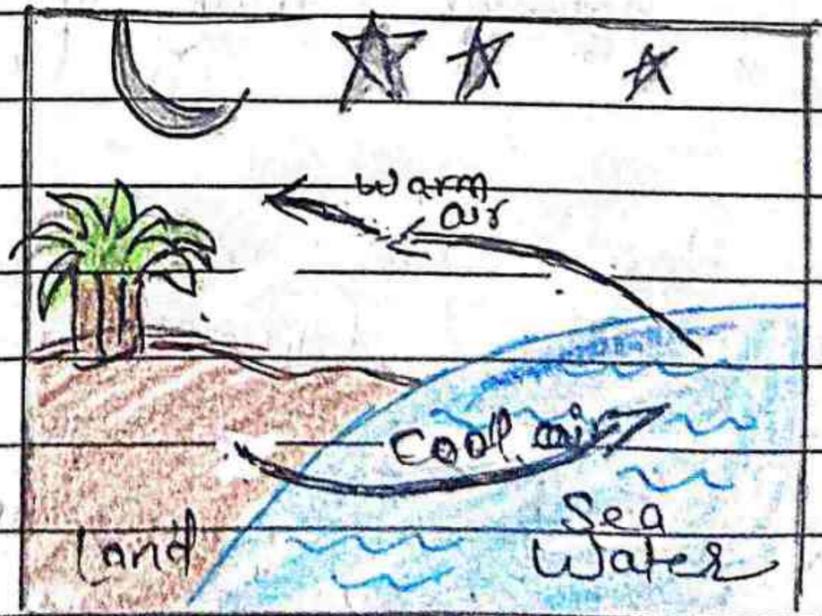
These are two types of breezes -

1. Sea breeze - During the day time wind blow from sea to land. It is called sea breeze.

2. Land breeze - During the night time, the wind blows from land to sea. It is called land breeze.



Sea Breeze



Land Breeze

Q4. What are the factors on which evaporation depends?

Ans - The factors on which evaporation depends are -

1. temperature
2. wind speed
3. surface area
4. humidity

Q5. Why are mornings and evenings cooler than the noon time?

Ans - Because at the noon time sun is directly overhead and earth receives

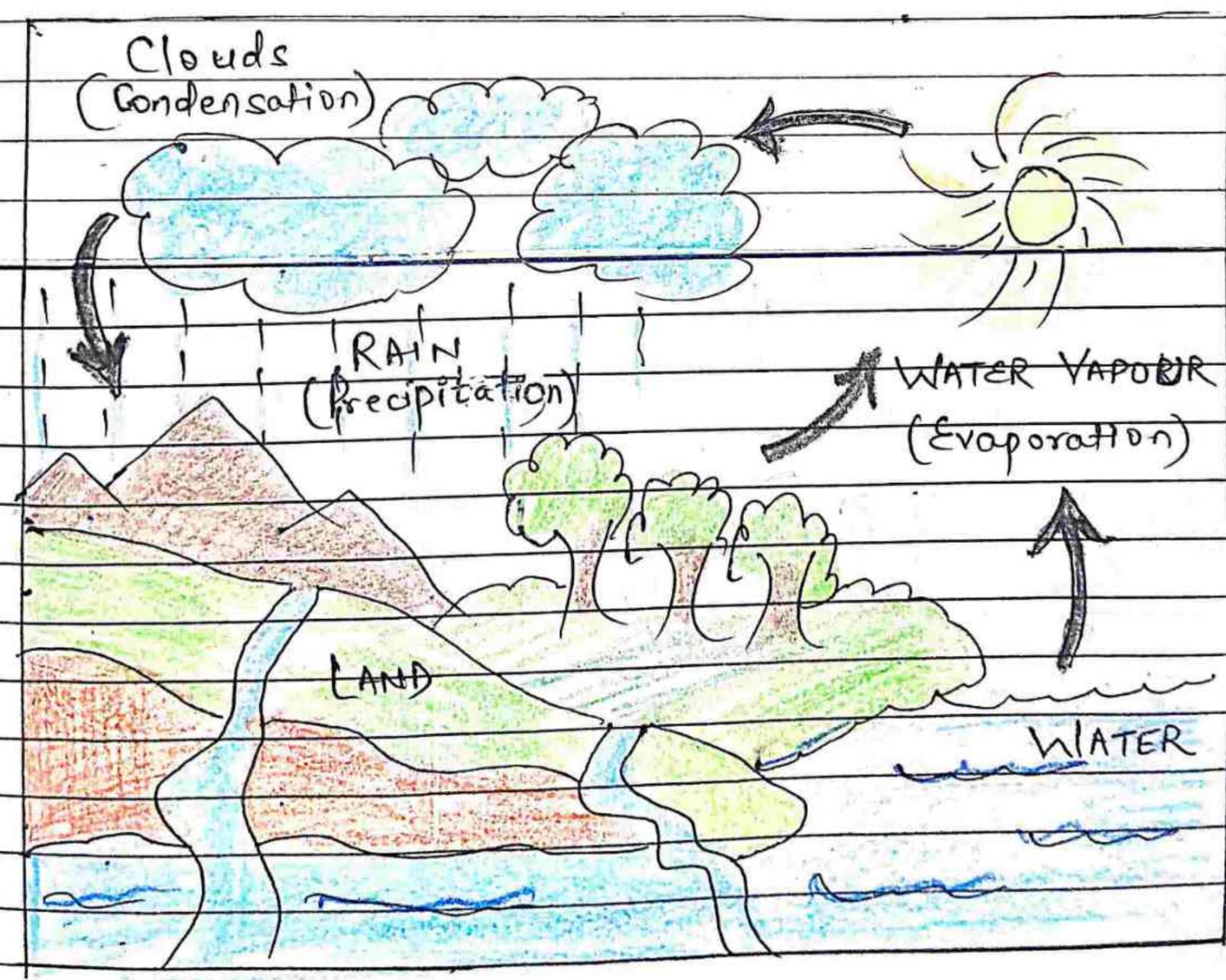
straight ~~sun~~ sunrays whereas in the mornings and evenings the sunrays are slanting. So the noon time is the hottest time of the day.

Q6. How does weather affect the life of people? Give any three examples.

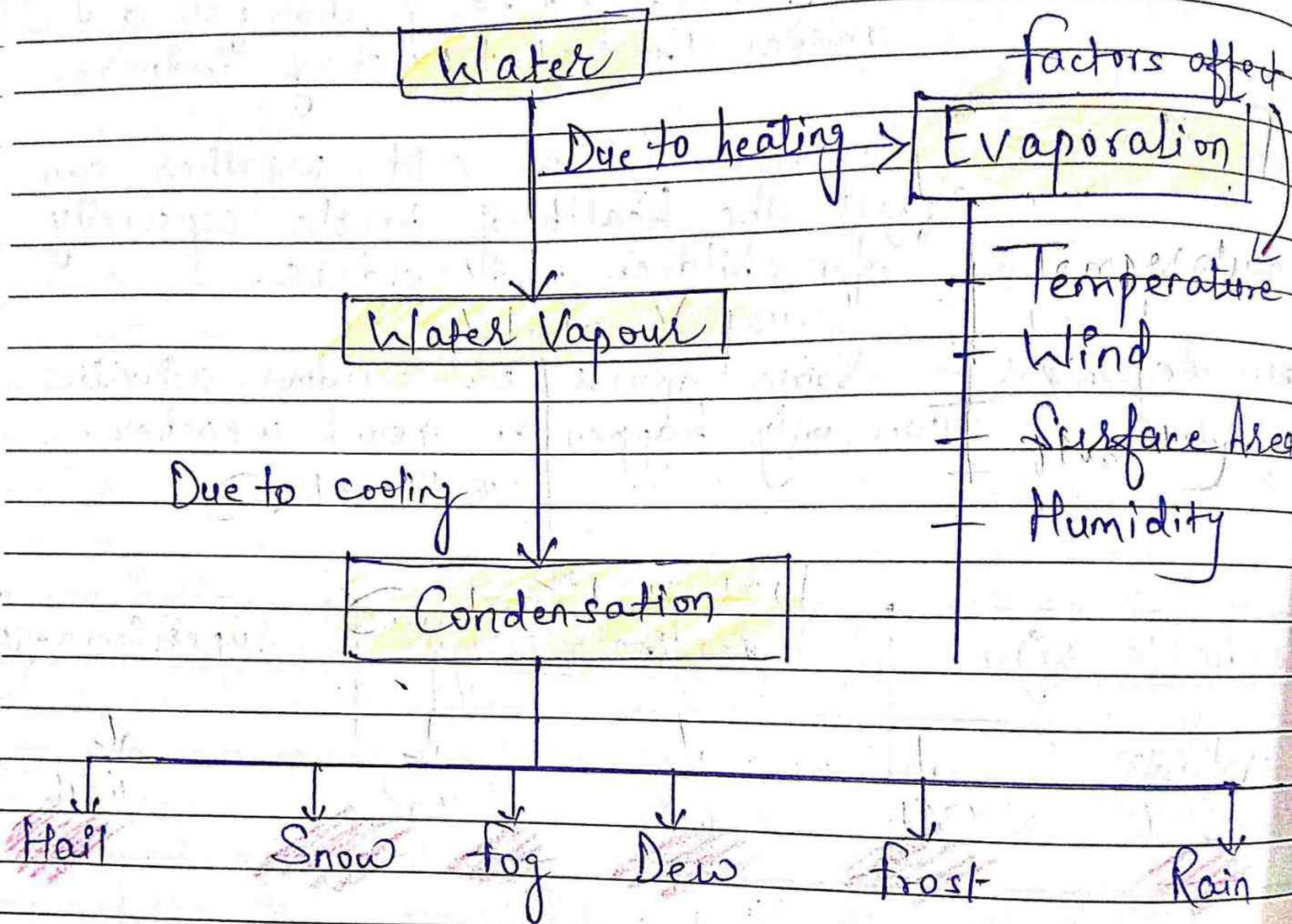
Ans - Weather affects our daily lives in many ways -

1. Clothing - People wear different clothes based on the weather such as light - coloured clothes in hot etc.

- 2. Transport - Rain or fog can make driving difficult. Heavy snowfall makes the people stay indoors.
- 3. Health - Extreme hot or cold weather can affect the health of people especially for children and elders.
- 4. Activities - Some sports or outdoors activities can only happen in good weather.



WATER CYCLE

Mind Map

C. Fill in the blanks.

1. Water turning to water vapour due to heat is called evaporation.
2. Water vapour changing into water due to cooling is called condensation.
3. Frozen rain drops are called hailstones.
4. The clouds very near the ground are called fog.
5. When water vapour suddenly cools, it freezes into snow flakes.
6. Condensed water vapour in the form of tiny droplets on the ground is called dew.
7. Land gets heated faster than water.
8. In coastal areas sea breeze blows towards the land in daytime.