SNBP SECONDARY AND SENIOR SECONDARY SCHOOL, CHIKHALI, PUNE
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CLASS NOTES

CLASS IV **SUBJECT : SCIENCE**
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New words

1. Weather 2. Climate 3. Revolution 4. Atmosphere 5.Breeze 6. Evaporation 7.Humidity
8. Condensation 9. Precipitation 10. Purification 11. Soluble impurities 12. Insoluble impurities
13. Sedimentation 14. Decantation 15. Filtration 16. Chlorination

Pre-activity

1. Write down the names of different seasons in India.

2. Unscramble the weather words given on page 213.

Q1) Give reasons for each of these.

1. Some people boil water for drinking.
Ans. Boiling kills harmful germs present in the water and makes it potent

2. We sweat a lot on a hot day during the monsoon.
Ans. During monsoon, the humidity of the air is more, that is, the air has more water vapours in it. This water vapour condenses on coming in contact with our body and forms sweat.

3. Coastal areas are cooler during the day.
Ans. Due to sunlight, sand heats up faster than water. As a result, the air over the sand warms up and rises. The space over the sand is taken up by the cooler air over the water in the sea. Hence, coastal areas are cooler during the day.

Q2) Answer these questions in brief.

1. What is weather? What are the factors that control weather?
Ans. Weather is the condition of the atmosphere of a place at a particular time. The other factors are temperature, wind, humidity, and surface area.

2. How is evaporation affected by humidity and wind?
Ans. The higher the temperature, the faster the evaporation. Wind helps water to evaporate faster. The stronger the wind, the higher the rate of evaporation. Lesser water vapour or humidity results in drier air, leading to a faster evaporation rate. Thus, clothes dry faster in summer than in the rainy season.

3. How can we remove soluble impurities from water?
Ans. By boiling and chlorination , we can remove soluble impurities from water.

4. What are the different components of air?
Ans. Air is a mixture of gases. It contains nitrogen, oxygen, water vapour, dust, and smoke particles, and other gases like carbon dioxide and argon.

Q.3) Answer these questions in detail.

1. What are land breezes and sea breezes? How are they formed?

Ans. Land breeze: At night, the land quickly loses its heat, while the sea retains its warmth. This means the air over the water is warmer and lighter and therefore begins to rise. The cool wind above the land begins to move towards the sea to replace the rising warm air. This cool air that blows from the land is called a land breeze. It blows only at night.

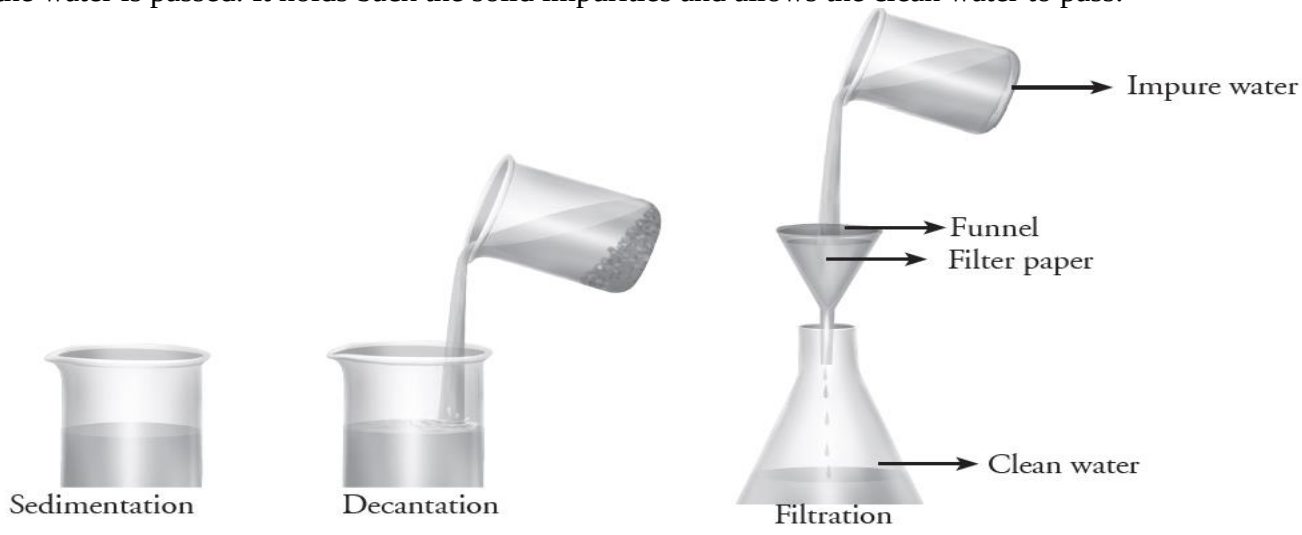
Sea breeze: During the day, the land gets heated up quickly and the air above the land also warms up faster than the sea. As the warm air rises, the cool wind blows towards the land to occupy the space created by it. This cool air is called a sea breeze. It blows in the daytime

2. What is the water cycle? Explain the cycle of water in nature.

Ans. The heat of the sun changes water found in water bodies (lakes, rivers, oceans, ponds, etc.) into water vapour (evaporation). As the water vapour rises, it comes in contact with the cold air and cools down(condensation). The water vapour then changes into tiny drops of water and forms clouds. When the drops become too heavy and the clouds can no longer hold them, they fall to the ground as rain, hail, or snow. This is called precipitation. This process where water constantly moves from the surface of the Earth to the sky and then back to the ground is called the water cycle. This cycle goes on all the time in nature.

3. With a diagram explain the two ways in which we can remove insoluble impurities from water.
Ans. Sedimentation and decantation: In this method, water is kept undisturbed for some time. The heavy impurities settle down at the bottom of the container, leaving the clear water on top. This process is called sedimentation. The clear water on top is slowly poured into another container. This is called decantation.

Filtration: Filtration is a process by which insoluble impurities are separated by passing the water through filters. Usually, filter paper is folded in the shape of a cone and fitted in a funnel through which the water is passed. It holds back the solid impurities and allows the clean water to pass.



Q.4) Out of the box.

1. After floods, the government often distributes chlorine tablets to the affected people. Why?

Ans. Chlorine is a disinfectant. It kills germs in the water collected in the streets and puddles and protects people from getting sick.

POST ACTIVITY:

1. Draw the diagram of the water cycle.

SUBJECT TEACHER HOD COORDINATOR PRINCIPAL