



Grade 6



SCIENCE



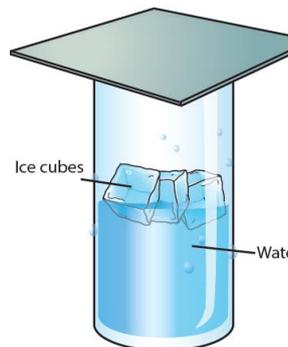
Water as a natural resource

Learning outcomes :

- Name the three states of water
- Describe ground water, precipitation and surface water as sources of water
- Give examples for ground water, precipitation and surface water
- Classify the water based on salinity
- Conduct simple experiments to compare the amount of salt dissolved in fresh water, sea water and brackish water
- Describe the importance of water for the existence of life
- Explain the importance of water for human activities
- Accept water as a limited natural resource
- Classify based on different criteria

Required materials: Ice, a piece of cardboard, empty fish tank, Gravel, stones, sand, clay, water, a tin with small holes, three vessels with wide opening, salt, biscuit, fried pappadam

Activity 1



Put some water into a glass and close it with a piece of cardboard. Leave it for a few minutes. Observe the outer surface. Then, add some ice cubes into it and close it the piece of cardboard. Leave it for a few minutes and observe the outer surface well.

1. Write the observations.

For your knowledge

Water vapour in the atmosphere condenses on the outer surface of the glass. Therefore, drops of water can be seen on the outer surface of the glass.



Activity 2



Keep some fried pappadam and a few biscuits open to the air for a period of time.

1. What can you observe after a few times?

For your knowledge

It happens due to the presence of water vapour in the atmosphere. Hence, you could understand that there is water vapour in the atmosphere.

Following are a few other states that water exists in the environment.



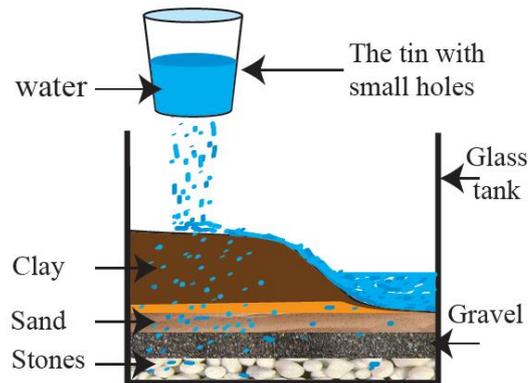
For your knowledge

Water exists in three states in the environment.

Ex: Solid, liquid, gas



Activity 3



Take the empty fish tank and fill it with gravel, stones, sand and clay. Then pour some amount of water through the tin with small holes. After a few minutes observe it well.

1. Name three places water exists on land.

For your knowledge

- Water that collected among stones – Ground water
- Water that falls through holes of the tin – Precipitation
- Water that remains on soil/ surface – Surface water

Activity 4

Take three vessels of same size (vessels with wide opening). Name them as A, B, and C.

A – Only water. Do not add salt.

B – 2g of salt and water

C – 6g of salt and water

Add equal amount of water to each vessel and mix it well. Then leave them for about 2 days under the sun. Observe them after all water gets evaporated.



A

B

C



1. What are the observations?

For your knowledge

- Nothing remains in the vessel A. The water can be considered as fresh water.
- A little amount of salt remains in the vessel B. The water in vessel B can be considered as brackish water.
- More amount of salt remains in the vessel C than vessel B. The water in vessel C can be considered as marine water.
- Likewise, based on salinity water can be categorized as fresh water, brackish water and marine water.

Evaluation

1. Classify water into three physical states based on the activity 1 above.

Water exists as solid	Water exists as liquid	Water exists as gas

2. State the places where water exists in the environment when you classify the water based on the availability. (Refer activity 2)

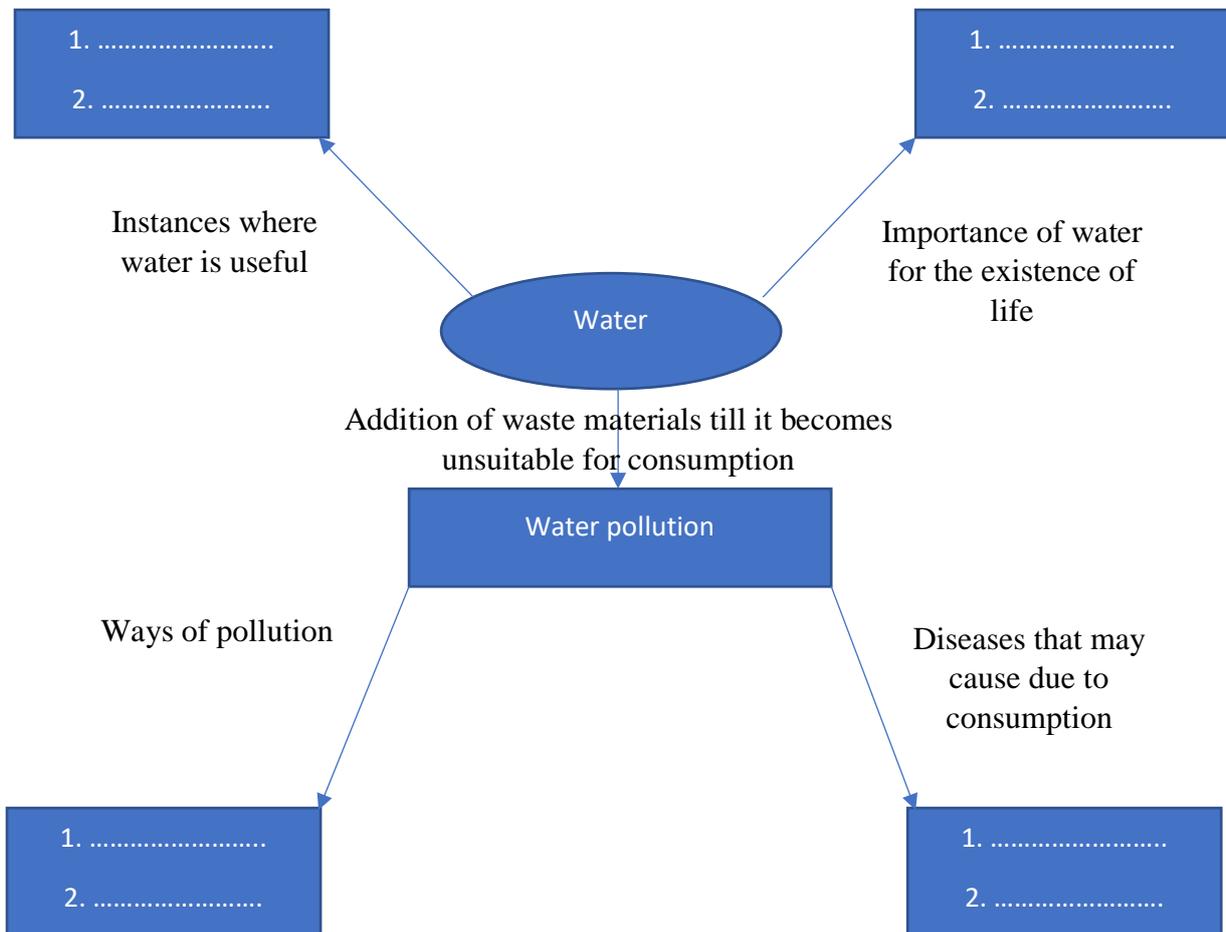
Precipitation	Surface water	Ground water



3. State the places where you can find water when you classify water based on salinity.

Fresh water	Brackish water	Marine water

4. Water is useful for us as a limited as well as a natural resource. Following is a concept map designed based on it. Fill the blanks.





5. Identify occasions where water is wasted at home or school. Mention the ways to minimize wastage of water and fill the table given below.

Occasions of water waste	Ways to minimize the wastage of water

6. Design creative items to make the family members aware of the ways to minimize the wastage of water.

7. Write an essay on, “water is the lifeblood”.



Summary

