

ACTIVITY NO. -18-WATER PURIFICATION

Subject	Science
Class	VII
Chapter/Unit	Wastewater story
Topic	Purification of polluted water
Time	30 minutes
Nature of Activity	Pair work

What will I learn (Learning Outcome)?

Students will interpret the importance of purification of water.

Skills: Analyzing, Applying and Interpreting.

What I have to do?

To see how water is purified in the water cycle.

What do I require?

- Four cups of dirt or sand
- Twelve stones
- A large glass bowl
- A short glass
- Plastic cling film and
- Sunny day

What do I need to know?

Water cycle or the hydrological cycle, is the continuous movement of water over, above, and beneath the Earth's surface. As water moves around in the hydrosphere, it changes its state among liquid, vapor, and ice. The process through which a liquid becomes a vapor, is defined as Evaporation. When the air cools, the water vapor condenses in the clouds and falls to the earth it hits the ground and is absorbed in many ways. It can be absorbed by plants, stored on the surface in a lake, stream, ocean, or evaporated by the sun. It can also be absorbed into the soil or pulled through the soil for years as groundwater. The water used by plants can go back into the earth by transpiration.

In the water cycle, evaporation and condensation are the key processes that help in rainwater being pure. These processes can also be used to purify water for drinking or industry use.

➤ Teacher's Activity

Teacher will

1. explain the concept of water purification
2. arrange the materials for the individual
3. make pairs and explain the role of each member of the pair.
4. give instructions regarding the activity.

How will I proceed?

➤ Student's Activity

1. Student A will mix the dirt (or sand) and water in a large bowl.
2. Student B will arrange a clean and empty short glass in the center of the bowl.
3. Student A will place the bowl outside in the sun.

4. Student B will cover the bowl with the plastic wrap and weigh down the edges with the remaining rocks
5. Student A will place one rock on the plastic wrap directly over the cup.
6. Student B will allow the bowl to remain in the sun for twelve hours.

What have I observed?

Observation	In the cup	In the bowl
After 12 hours		

What have I learnt?

Minerals like _____ and other substances dissolved in water are left behind. As a result, when the water vapor condenses to become water again, it is relatively pure. The _____ and _____ are the key terms that help in the purification of water.

What am I curious to learn?

Let us find out

- how waste water and sewage is disposed of in our house or apartment complex
- where the waste water goes.
- whether there are open drains, stagnant water and contamination of groundwater.
- how and where the sewage is disposed of.

Let us also trace the route of sewage disposal.

Let me evaluate myself

Q1. What are the two processes responsible for the purification of water?

Ans. _____

Q2. Give one example from your everyday life where we come across the process of condensation.

Ans. _____
_____.

Q3. What is plastic wrap?

Ans. _____
_____.

Q4. What would happen if the plastic wrap was dirty?

Ans _____

Q5. Depict the water cycle diagrammatically.