

# WELCOME TO THE ONLINE CLASS

**SESSION NO: 7**

**CLASS: 4**

**SUBJECT: SCIENCE**

**CHAPTER NUMBER: 12**

**CHAPTER NAME: AIR, WATER AND WEATHER**

**SUB TOPIC: PURIFICATION OF WATER : FILTRATION AND UNDERGROUND WATER**

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**CHANGING YOUR TOMORROW**

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# LEARNING OBJECTIVE

**To enable the learner to:**

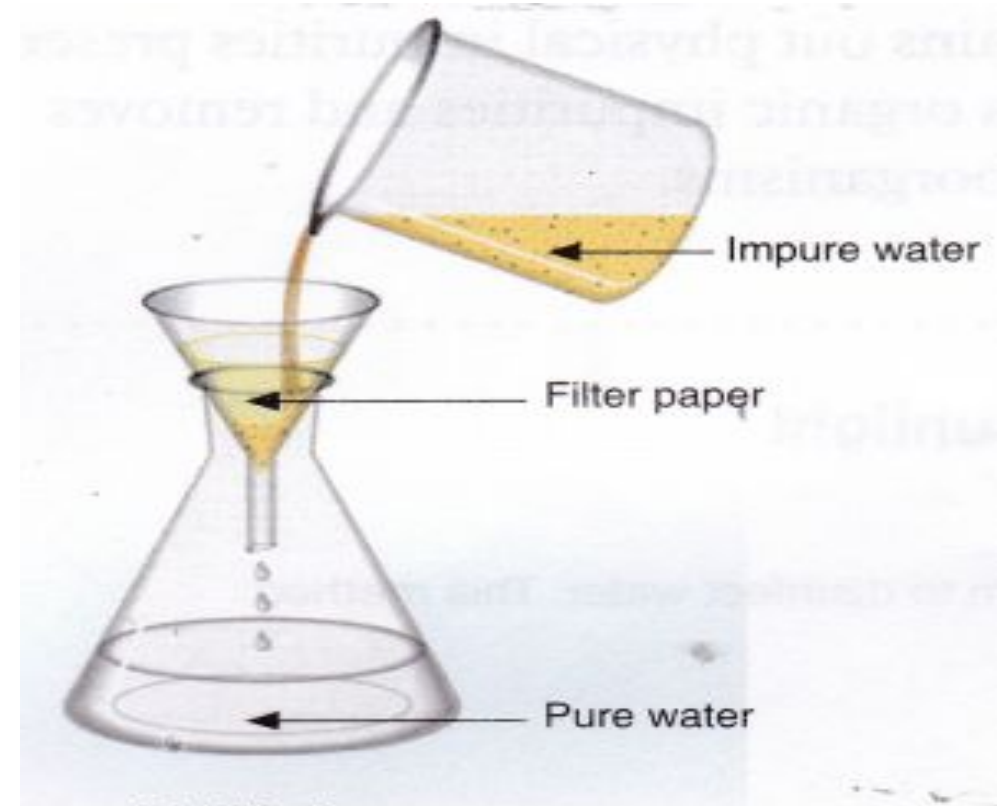
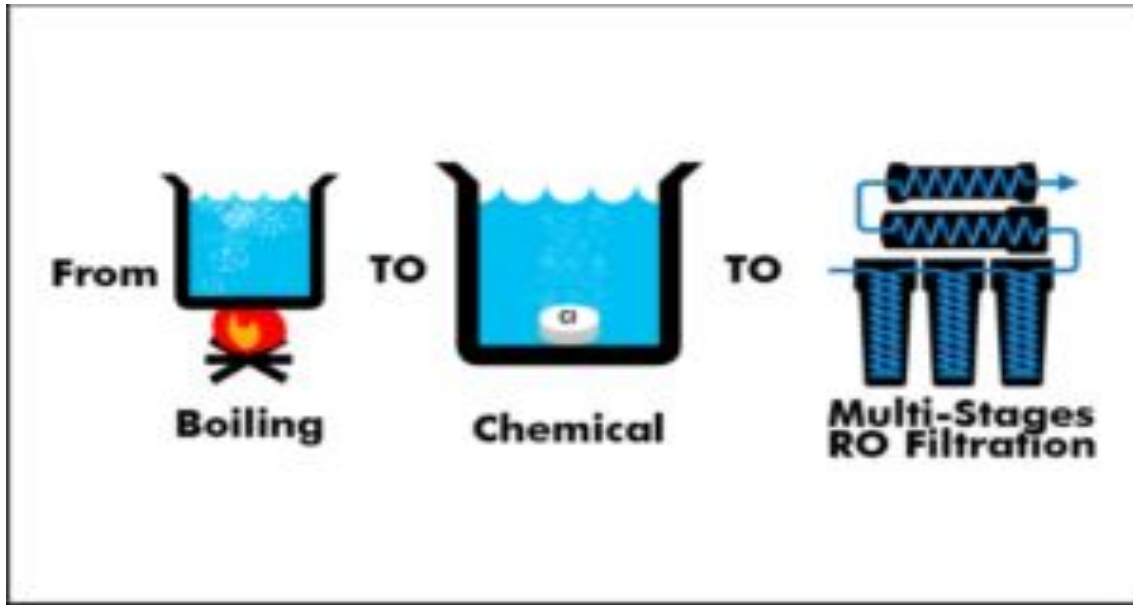
- **Know about different impurities of water**
- **Learn how water can be purified**

## RECAPITULATION

1. Settling down of heavy insoluble impurities in a liquid is known as \_\_\_\_\_.
2. Process for the separation of mixtures of immiscible liquids is known as \_\_\_\_\_.
3. What are the different types of impurities present in water?
4. Water in wells and rivers is impure. [ Give reason]
5. Water in which vegetables and fruits have been washed can be used to \_\_\_\_\_ the plants.

# FILTRATION

- Filtration is a process that removes particles from suspension in water.



## DIFFERENT WAYS OF FILTRATION

- At home while pouring tea, you filter it through a strainer.
- Water on the surface of the earth gets filtered when it passes through layers of soil to become underground water.



## CHLORINATION

- Chemicals like chlorine are used to kill germs at the waterworks of a city.
- The process of adding chlorine in water is called chlorination.



## BLEACHING

- Bleach added to water can destroy germs.
- If well water has to be used, potassium permanganate should be used to purify the water.



## BOILING OF WATER

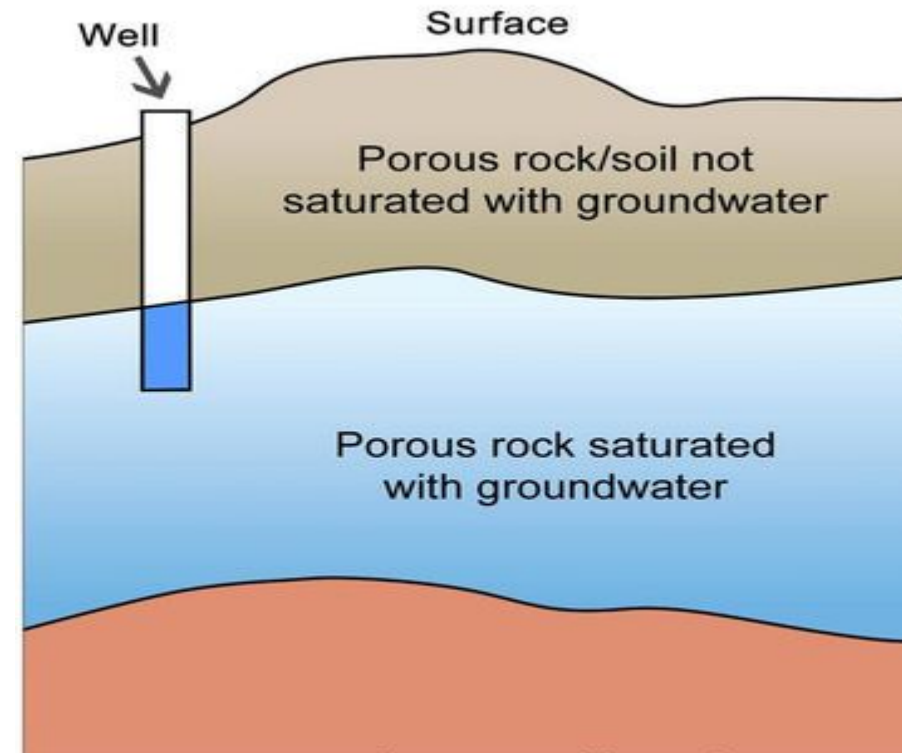
- The safest way of purifying water is to boil it, as boiling destroys germs.
- We can also use a water filter for cleaning water.





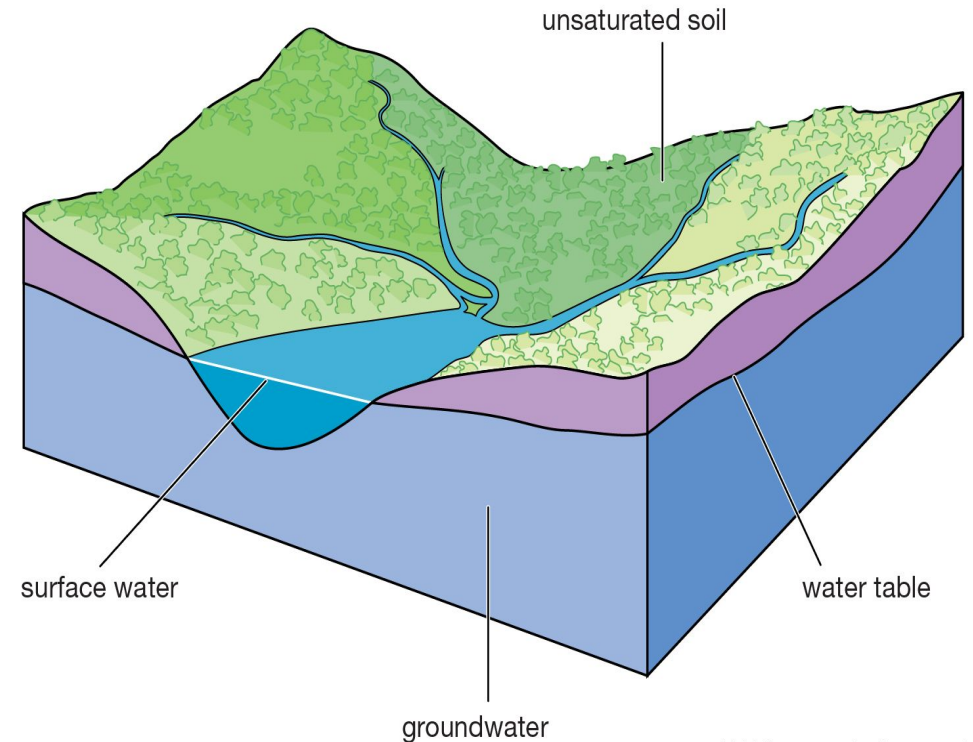
## UNDERGROUND WATER

- Water that falls like rain and the water that we throw away goes down into the ground.
- It seeps through the topsoil, the subsoil, and porous rocks.
- It finally settles below the porous rocks as it cannot pass through the non-porous rocks.
- So, there is the large storage of underground water.



## WATER TABLE

- The level of underground water in an area is called the water table.
- Water is a precious natural resource.
- We should use it carefully.



## **SUMMARY**

- **Filtration is a process that removes particles from suspension in water.**
- **Water on the surface of the earth gets filtered when it passes through layers of soil to become underground water.**
- **Chemicals like chlorine are used to kill germs at the waterworks of a city.**
- **Bleach added to water can destroy germs.**
- **The level of underground water in an area is called the water table.**

QUIZ!



1. \_\_\_\_\_ is the level of underground water in an area.

**Ans: Water table**

**2. Insoluble impurities are removed by sedimentation, decantation and \_\_\_\_\_.**

**Ans: filtration**

**3. Which is the safest method of purifying the water to destroy the germs?**

**Ans: Boiling of water**

## **HOMWORK**

- **Do the oral Q&A of the page no. 105.**



# LEARNING OUTCOME

**The learner will be able to :**

- **Know about different impurities of water**
- **Learn how water can be purified**

**THANKING YOU**  
**ODM EDUCATIONAL GROUP**