

# WELCOME TO THE ONLINE CLASS

**SESSION NO.: 6**

**CLASS: 5**

**SUBJECT: SCIENCE**

**CHAPTER NUMBER: 12**

**CHAPTER NAME: OUR LIFE SUPPORT**

**TOPIC: WATER TOO SUPPORTS LIFE, IMPURITIES IN WATER,  
REMOVAL OF INSOLUBLE IMPURITIES**

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**CHANGING YOUR TOMORROW**

# LEARNING OBJECTIVE

**To enable the learner to:**

- **understand the importance of water.**
- **know the types of impurities.**
- **learn the ways to remove the impurities.**
- **list the uses of water in our real life.**

## LET'S RECAP

- **Rahul has put one inverted glass in a beaker containing water. When he tilted the glass he observed that bubbles started to come out. What do you think from where this bubbles came? Explain your answer.**
- **How is a doctor able to fill in liquid medicine in a syringe?**
- **Why do the water coming out from the lowest hole in a bottle goes to a longer distance?**

# **WATER TOO SUPPORTS LIFE**

- **Water is as important as air for survival.**
- **We need water to drink.**
- **All living things need water to survive.**
- **We also need water for cooking, bathing, working and construction work.**
- **Rain water is the purest form of water.**

# USES OF WATER



DRINKING



WASHING CLOTHES



FOR PLANTS AND TREES



KITCHEN WORK



WATER SPORTS



WASHING UTENSILS



HYDRO-POWER



BUILDING CONSTRUCTION



WATER TRANSPORT



EXTINGUISH FIRE



INDUSTRIAL USE



WASHING CAR



IRRIGATION



BATHING



SWIMMING



FOUNTAINS



AQUATIC LIFE



CLEANING FLOORS

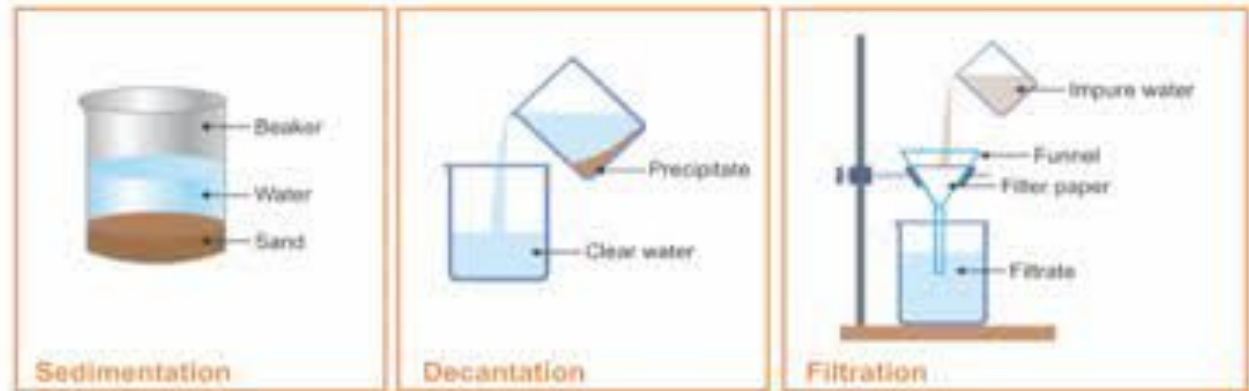
# IMPURITIES IN WATER

- When some unwanted substances mix in water, then the water becomes impure.
- There are many types of impurities:
  - Insoluble impurities
  - Soluble impurities
  - Disease-causing germs



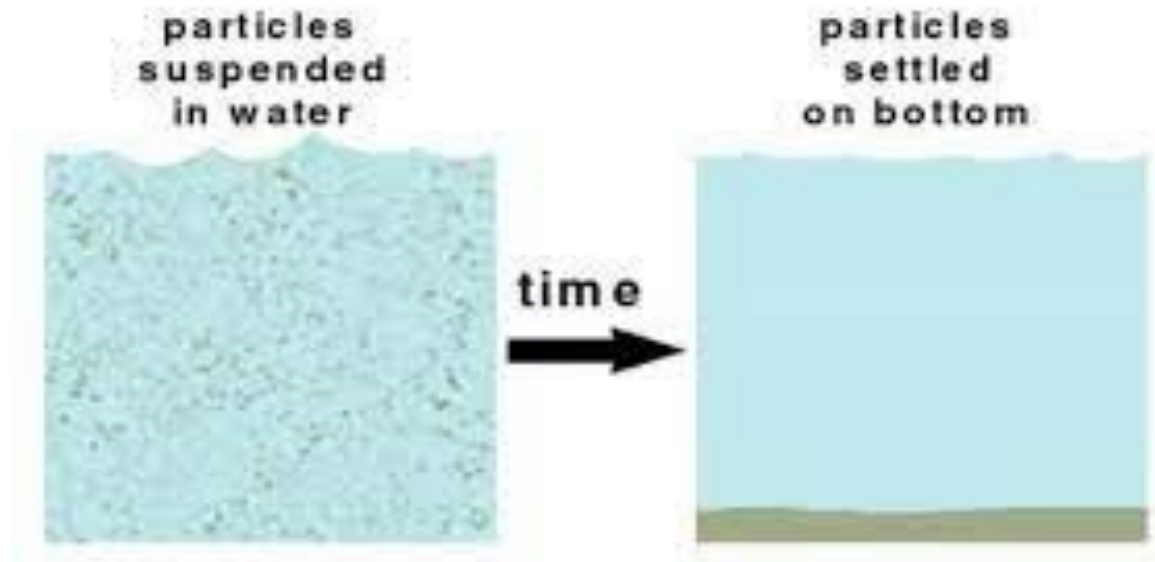
# REMOVAL OF INSOLUBLE IMPURITIES

- When the impurities are not soluble in water, they are said to be insoluble impurities.
- Insoluble impurities can be removed by
  - sedimentation,
  - decantation and
  - filtration.



# SEDIMENTATION

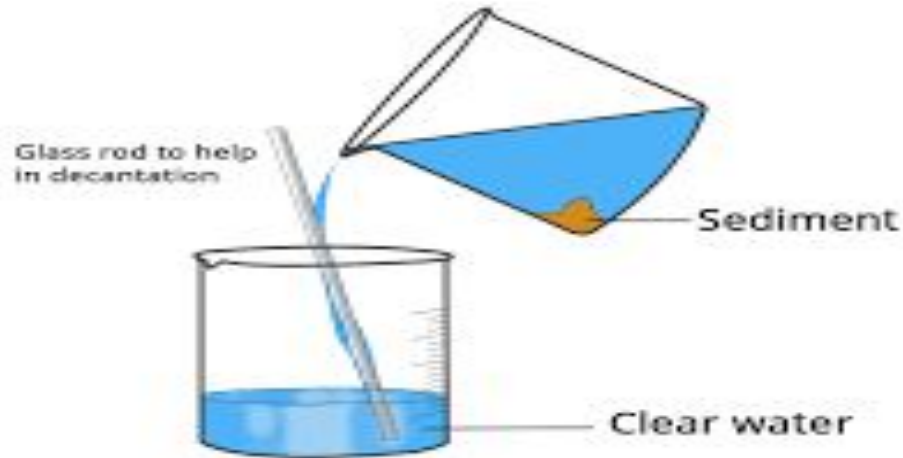
- The process of settling down of heavy particles present in water is called sedimentation.
- The impurities that settles down are called sediment.





# DECANTATION

- The process of separation of clear liquid into another container is called decantation.



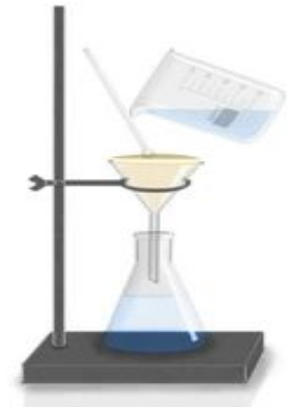
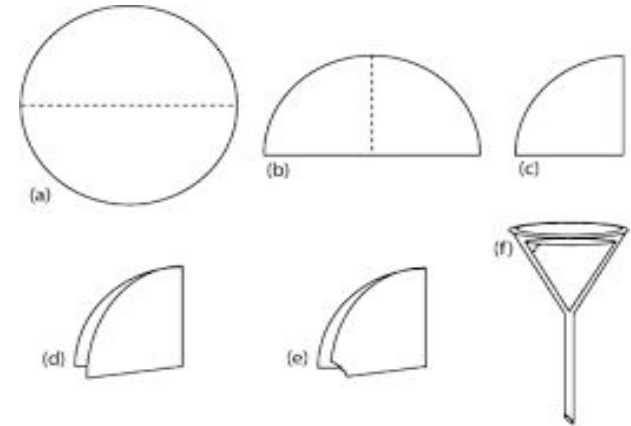
# FILTRATION

- The process in which solid particles in a liquid are removed by the use of a filter is called filtration.



# ACTIVITY TO PERFORM FILTRATION

- A circular piece of filter paper is taken and a cone is made out of it.
- The cone is placed inside a funnel.
- The funnel is placed on the mouth of a conical beaker.
- The mixture of soil and water is poured over the filter paper by using a glass rod.
- Drops of clear water will trickle into the beaker and gets collected as filtrate.
- Soil particles will be left on the filter paper.



# SUMMARY

- **Water is as important as air for survival.**
- **Rain water is the purest form of water.**
- **When some unwanted substances mix in water, then the water becomes impure.**
- **There are many types of impurities:**
  - **Insoluble impurities**
  - **Soluble impurities**
  - **Disease-causing germs**
- **When the impurities are not soluble in water, they are said to be insoluble impurities.**
- **Insoluble impurities can be removed by sedimentation, decantation and filtration.**

READY FOR A  
**QUIZ** ?

**Assertion(A): Argon is filled in glass tubes.**

**Reason(R): Argon produces a colourful glow in glass tubes.**

- a. Both A and R are true and R is correct explanation of A.**
- b. Both A and R are true but R is not the correct explanation of A.**
- c. A is true and R is false.**
- d. A is false and R is true.**
- e. Both A and R are false.**

**Ans: a. Both A and R are true and R is correct explanation of A.**

**Assertion(A): Air exerts pressure in all direction.**

**Reason(R): Air is everywhere.**

- a. Both A and R are true and R is correct explanation of A.**
- b. Both A and R are true but R is not the correct explanation of A.**
- c. A is true and R is false.**
- d. A is false and R is true.**
- e. Both A and R are false.**

**Ans: b. Both A and R are true but R is not the correct explanation of A.**

# **HOMEWORK**

- **Empty bottles of mineral water should be crushed before throwing them into the dustbin. Why?**



# LEARNING OUTCOME

**The learner will be able to:**

- **understand the importance of water.**
- **know the types of impurities.**
- **learn the ways to remove the impurities.**
- **list the uses of water in our real life.**

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