

Chapter 5

Water

LESSON PLAN

SPECIFIC OBJECTIVES

The students will learn about

- ❖ importance of water and its resources
- ❖ forms of water
- ❖ sources of water
- ❖ water cycle and its importance
- ❖ potable water; town water supply
- ❖ solution and its examples
- ❖ water – a universal solvent
- ❖ water pollution and its causes and prevention
- ❖ conservation of water; rainwater harvesting

Teaching Aids

Pictures/charts/models/animation on water as natural resource; different uses of water; tubewell and handpump; water table and aquifer; water cycle in nature; water filter and water purifier; water treatment plant; town water supply system; water pollution, waste water in river, algal bloom; water conservation, rainwater harvesting

Teaching Strategy

- ❖ Teacher will start the chapter by revising key features of water taught in previous class and will explain need, importance and resources of water.
- ❖ Teacher will discuss distribution of water on the earth.
- ❖ Teacher will discuss various forms of water and will perform Activity 2 showing our breath contains water vapour.
- ❖ Teacher will discuss the various uses and the amount of water used by individuals.
- ❖ Teacher will explain water cycle, processes involved in it and importance of water cycle.
- ❖ Teacher will ask students to solve 'Check Point 1'.

- ❖ Teacher will define potable water, how to make a water filter and different ways by which water can be made safe for drinking.
- ❖ Teacher will explain town water supply system.
- ❖ Teacher will define solution, solute and solvent and will explain water as a universal solvent by demonstrating Activities 3 and 4.
- ❖ Teacher will define water pollution, major causes of water pollution, i.e., untreated sewage, toxic water from factories, fertilisers, mixing of human excreta with water, etc., its harms and prevention of water pollution.
- ❖ Teacher will discuss water as a disaster by explaining its excess causes floods and its scarcity causes drought.
- ❖ Teacher will discuss ways of conservation of water and explain rainwater harvesting.
- ❖ Now, teacher will ask students to solve 'Check Point 2'.
- ❖ At last, teacher will sum up the lesson by going through the points given under the head 'Wrapping It Up'.
- ❖ Teacher will finally help students to answer the questions given under the head 'Test Yourself'.

Boost Up

- ❖ Teacher can help students to perform the activities given in chapter.
- ❖ Teacher can make students revise new terms given under the head 'Know These Terms'.
- ❖ Teacher can encourage students to learn the facts given under the head 'Something More'.
- ❖ Teacher can show animations related to the topics taught, if possible.
- ❖ Teacher should ask the students to tell why water is a boon for life.
- ❖ Teacher should ask questions related to importance of water, its resources and distribution of water on the earth.
- ❖ Students should be asked to tell the solid, liquid and gaseous forms of water.
- ❖ Teacher should ask the questions related to rainwater, surface water, groundwater, water cycle, and its importance.
- ❖ Teacher should assign Activities 1, 5 and 6 as home assignments and discuss the results in class.

Expected Learning Outcomes

The students understand and know:

- ❖ water, its need, importance and resources.
- ❖ different forms and distribution of water on the earth.
- ❖ sources of water.
- ❖ water cycle and its importance.
- ❖ potable water and the ways to make water drinkable.

- ❖ town water supply system.
- ❖ solution and water – a universal solvent.
- ❖ water pollution, its causes, harms and prevention.
- ❖ water as a disaster.
- ❖ conservation of water and rainwater harvesting.

Evaluative Questions

The teacher should ask the following questions to evaluate the students.

1. Why is water essential for life?
2. Write the percentage of total water on the earth present in oceans.
3. Name the forms of water in solid, liquid and gaseous states.
4. Name the purest form of water.
5. How are clouds formed?
6. What is the water fit for drinking called?
7. In the solution of salt and water, name the solute and solvent.
8. What is meant by rainwater harvesting?