CHAPTER: EVERY DROP COUNTS

Grade: **5**
Board: **CBSE**
Book: **NCERT**

1.

Chapter Summary and Placement

Read through the following to understand the gist of the lesson.

Water is an essential natural resource for the sustenance of life on earth.Not only human beings but also other animals too need water for their survival. The wasting of water is done only by the human beings. This chapter stresses on the reasons causing the wastage of water and importance of water conservation. Also the uses of water can be discussed in detail.

2.

LEARNING OUTCOMES

<On completion of the chapter, students will be able to:>

1. Understand changes in sources of water and water availability over time.
2. Identify the methods of saving water
3. Understanding consequences of wasting water and avoid wastage of water

3. PREVIOUS KNOWLEDGE REQUIREMENT

<The below points should be refreshed before introducing the chapter:>

1) Remember the different sources of water like, lake, ponds, well, rain water harvesting etc.

4. TEACHING PLAN

Follow this section for getting ideas on teaching the content covered in the chapter. The subtopic given in the first column with the matching learning outcome can be explained using instructions and resources listed subsequently

Subtopic and Learning Objective #1

LO: Understand changes in sources of water and water availability over time.

Teacher Activity

1. The teacher can introduce the chapter by asking a few questions to the students referring about the sources of water in their house.
2. Narrate the story of Gadisar to the students . The features of the lake should be given importance while explaining the story.
3. Carry a world map and political map of India to the class and help the students locate Uzbekistan and Jaisalmer,Rajasthan respectively.
4. An introduction to Al-Biruni, the traveller of the ancient times .
5. Explain that articles by travellers and other resources like coins, paintings, scripts become useful to us to know about our history.

Check for understanding:

a) Who was Al-Biruni?
b) What was the significance of Ghadsisar?

Resources Suggested

Textbook, chalkboard, Resource 1

Resource 1: Sources of water:



River



Lake



Pond



Well



Ghadsisar lake



Al-Biruni

Subtopic and Learning Objective #2

LO: Identify the methods of saving water

Understanding consequences of wasting water and avoid wastage of water.

Teacher Activity

1. The teacher can introduce the topic by explaining about the effects of less rain.
2. Ask the students about the possible reasons for less rain
3. After a small Q&A session the teacher can explain the importance of conserving water.
    - Closing the tap while not in use.
    - Trying to stop a leaking tap on the way to school
    - Informing the authorities about a leakage in the public water distribution channel.
    - Rainwater harvesting
4. Customs based on water, created by the people of olden days, can be considered as one way to conserve water. Water is considered as god . An example is the Ganga Aarti that happens every day.
5. Discuss on the types of vessels that water is stored in the house.

6. Discuss the difficulties that many people face to get drinking water.
    - In south Africa drinking water is rationed out to the citizens of the city
7. Water wastage can be stopped from the ground level. We can encourage people in our house to notice water wastage and reduce the consumption of water wherever possible. Show Resource 2 to familiarise students with the posters for water conservation
    - Sewage and wastewater drainage into traditional water bodies
    - Release of chemicals and effluents into rivers, streams and ponds.
    - Lack of efficient water management and distribution of water between urban consumers, the agriculture sector and industry
    - Reduction in traditional water recharging areas
    - Population of India.
8. Carry out Activity 1 and 2

Check for understanding:

a) What is rain water harvesting?
b) Why are wells drying up nowadays?

Resources Suggested

NCERT textbook, Resource 2

Activity 1

Name of the activity – Collect poem based on water
Type of activity – Individual
Learning Objective: Understand the views of others about water
Use it for – Reading and analytical skills
Materials – Poems collected by students.

Teacher instructions:

1. The teacher may ask the student to gather poems written about water
2. It can be in any language.
3. The students can go through the poems they have collected and try to explain the view of the author to the class.
4. Take others help to interpret the meaning of the poem if the students get stuck.

Activity 2

Name of the activity – Interpret a water bill.
Type of activity – Individual
Learning Objective: Understand the details given on a water bill
Use it for – Reading and interpretation skills
Materials – Water bills of their own house or from neighbours

Teacher instructions:

1. Collect a water bill from a neighbours house if you don't have one.
2. Try to understand the details given on the bill
3. Make a note of all the details and its meaning in your notebook.
4. Discuss it in the next day class
5. Remember to keep the bill safe or give the bill back to the owner.

Resource 2:


SAVE WATER
THE WORLD
IS IN
YOUR HANDS


"Make every drop of water count."

5. WORKSHEETS

Print or copy the worksheet questions on the blackboard and ask the students to attempt them. They can be given as homework or a class test as well.

Worksheet 1

Use it like: Class test, Home assignment, Revision

State whether the following are true or false.

1. **The increasing population is also contributing to shortage of water.**
2. **The soil around the trees should be covered with concrete and cement.**
3. **We should not pay the water bill.**
4. **We should put a motor pump directly in the Jal Board pipeline to overcome water shortage.**
5. **Rainwater should be collected in underground tanks for future use.**

Worksheet 2

Use it like: A class test, home assignment, revision

1. **Name the sources of water**
2. **Who was Al-Biruni?**
3. **Why did people come to the ghats of Ghadsisar?**
4. **How do you think that new brides in the city follow the custom of worshiping water?**
5. **Who made Ghadsisar? Describe its structure**
6. **Why did people in Rajasthan not face water shortage in earlier times?**
7. **How did the group called “Tarun Bharat Sangh” help Darki Mai?**

6. SOLUTIONS

This section gives you sample answers for activities and questions listed above.

Worksheet 1

1. True
2. False,
3. False
4. False
5. True

Worksheet 2

1. Wells, pons, lakes, pips, canals, rain water etc are sources of water.
2. Al-Biruni was a traveller who came to India from Uzbekistan. Al-Biruni carefully observed and noted down the details of all that he saw. He wrote especially about those things that he found very different from his own country.
3. All around the lake there are ghats with steps leading to the water, decorated verandahs, large halls, rooms and much more. People came here to celebrate festivals and for programmes of music and dance. Children came to study in the school on the ghat.
4. In cities the new bride worships the water from the taps in her home..
5. King Ghadsi of Jaisalmer got it made 650 years ago with the help of the people. Rainwater collected in this lake spread over many miles. It was made in such a way that when the lake was full, the extra water flowed into another lake at a lower level. When that too filled up, the extra water flowed into the next lake. This way all nine lakes filled up. This rain water could be used throughout the year.

6. People knew that every drop of water was precious. Lakes and johads were made to collect water. Water was everyone's need. One and all came together in this work – be it a businessman or a labourer. Some water from the lakes soaked into the ground and reached the wells and bavdis (stepwell). The soil of the area also became wet and fertile. Every house had a system to collect the rain water.
7. The women of the village used to spend the entire day looking after their home and animals.
8. In the summer, when the wells dried up, they had to leave the village. Darki Mai heard about this group and asked for help. Together, the people from the group and the village decided to make a lake. The problem of food and water for animals is now less. People get more milk.

7. EXTRA RESOURCES

Carry out the following suggested activities/ tasks if you have the time and resources to do them

1. **Reference Video links:**

   The students can be suggested to watch the following videos/ shown in class:

   https://www.youtube.com/watch?v=rl0YiZjTqpw

   https://www.youtube.com/watch?v=bNfT9WKe8cA

2. **Extension activity 1:**

Carry out the following suggested activities/ tasks if you have the time and resources to do them

Purpose: Class discussion

India is considered to be a peninsular country. We have seas on all the three sides. Discuss whether we can have sea water as an option for water crisis. What all will be the problems faced. Research and get the details

https://www.quora.com/Why-isnt-desalination-the-answer-to-Indias-water-scarcity-problem

OR

Make a poster that gives a message to conserve water. The activity can be performed as individual or in a group.