Try this.

1. Make a small hillock of mud and stones in the school yard. Set some stones into the hillock. Pour water over the hillock from a watering can, like rain. Use the following points to study how the water flows over the hillock.

- In which direction does the water flow?
- How does water flow on the steeper slopes?
- How does it flow on the gentler slopes?
- What happens when the stones cause an obstruction?
- Where do puddles form?
- When does the direction of flow change?

2. Now stop watering the hillock. Make observations using the following points :
   - Why did the hillock dry when we stopped pouring water?
   - How long did the hillock take to dry?
   - Which part of the hillock dried quickly?
   - Which part took longer to dry?
   - Why did it take longer to dry?

You will realize that some rainwater flows away over the ground. Some water seeps into the ground. All the water we get comes from the **rain**. The rainy season lasts for three or four months. Along with us, all living things use this water all year round.

If we do not store water, we will not have enough water for our needs. That is why, we have to save water. Water must be used economically. In this lesson, we will see different ways of storing water.

Old water stores

In the olden days, several methods of storing water were used in our State. Nowadays, these old water stores are rarely used. However, their remains can be seen in all places. Some of them are very beautiful. Water in some of these stores never gets depleted.

(1) Wells

Some rainwater seeps into the ground. Wells are dug to obtain this water.

(2) Water tanks in forts

A tank on Fort Shivneri

People lived on the hill forts in the past. They also needed water. The forts had reservoirs and tanks dug into the stone.

A Draw-well (*Aad*)

(3) Draw-wells (*Aad*)

In the past, draw-wells were dug to get drinking water. They were small wells from which water was drawn using a small pot (*pohra*) tied to a rope.

Atpadi in Sangli district had a draw-well in every Wada. The draw-wells had water all year round. When the tap-water system was introduced, the draw-wells went out of use. Many were sealed. Now there are very few left in Atpadi. This can be seen in many villages.

A bund on a river

(4) Rivers and bunds

Earthen or masonry bunds were built across rivers to store their water.

A tank at Chandwad in Nashik district

(5) Old reservoirs

Reservoirs were built in areas of low rainfall or in areas without a major river. Most of the reservoirs were built using stone and mortar.

A tank in Aurangabad city

(6) Old tanks (*Houd*)

Earlier, tanks were used to store water. Some large cities still have these old tanks. Some of them are still in use.

Find out if your locality has such old water storage systems.

What's the solution ?

Savani and Ameya get tap water in their house. As a result, the water from the draw-well which had been used since the old days is not used any longer. Because of this, grandmother is upset. Suggest how Savani and Ameya can use the draw-well water for purposes other than drinking.

Recent Systems

(1) Dams

The most important of all recent water storages is the dam. Dams made it possible to store huge quantities of water. As a result, more land was brought under cultivation. Cities began to grow. It became possible to set up factories and generate electricity. Maharashtra has several large dams such as Jayakwadi, Koyna, Ujni and Yeldari.

Find out exactly where these dams are located on the physical map given in your textbook.

(2) Borewells

Earlier, wells were dug to reach the water under the ground, but it was not possible to draw deep-seated ground water. Now, with the help of electric pumps, it is possible to do so. Borewells are dug for this purpose. These wells are very deep, but very narrow.

Use your brain power !

(1) Find out if there are any old water stores in your locality. Think about how these old stores can be used again.

(2) Where do water stores like rivers, dams, wells and lakes get their water from?

Panpoi (Drinking water stands)

People out on the roads need water when they are thirsty. In some places, big clay jars of drinking water are kept for the use of such people. This water is offered free of charge. This is known as Panpoi. Panpois are set up by individuals or institutions. Panpois are very useful, especially in summer.

Do you know ?

Chhatrapati Shivaji Maharaj gave the following instructions for the construction of hill forts.

'A fort (hill fort) should be built after first finding out if there is water in the place. If there is no water, and if it becomes necessary to fortify the place, then by breaking the rock, reservoirs and tanks should be built.'

'... One should not wholly depend upon the supposition that there is a spring of water in the fort and that it would somehow or other supply enough water.'

'... For storing water, 2-4 reservoirs should be constructed. Water from them should not be allowed to be spent. The water in the fort should be well protected.'

What we have learnt –

- Traditional methods of water storage.
- Modern methods of water storage.
- Economical use of water.

Always remember –

Water is a natural resource.
All living things need water.
We must keep this in mind
when we use water.

Exercises

(A) Answer in short.

1. Why should we store water?
2. What were the traditional ways of storing water in the house?
3. What is a dam built on?
4. What must we keep in mind while using water?
5. What is water pollution?

(B) How can water be saved in places with water shortage? Suggest what can be done.

(C) What good habits must we cultivate in order to use water economically?

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