

Water – more precious than gold

Most rivers originating in the Himalaya are fed by snow and the ice of glaciers. When rain falls on forests, the vegetation staunches the flow, allowing water to seep gently into the ground. Thus are wells, lakes and rivers fed. Forests also hold soils in place. Protecting forests for wildlife results in protecting water 'catchments'. In ancient India people believed that forests were the 'mothers' of rivers. They worshipped the sources of small streams and large rivers, which were almost invariably located in thick forests.

AIM: To help the children value water, understand the need to save water and understand how easy it is to recharge aquifers (underground water storages), even in towns and cities.










OBJECTIVE: To help convert geography learnings into an understanding of the interaction between climate, physical features, wildlife and the availability of fresh water for humans living on the Indian subcontinent.



INTRO: Talk about the precious resources of the earth and how the things that are perceived as precious, such as gold, are not as valuable as water, without which life would become impossible. We would not throw away gold. Why should we waste or pollute water?

CONTENT: Maps of India showing rainfall distribution, physical features, forest cover, major rivers and an illustration of the hydrological cycle. Newspaper clippings reporting floods, droughts in India and water shortages in *your* city.

METHODOLOGY:







-  Discuss the Indian monsoon. Name major rivers and forests that feed such rivers. List the ways in which we use fresh water.
-  Forests and water: 'The forest is the mother of the river.' Adivasis consider the tiger to be a "water god" because wherever it is found, water is found.
-  Only 0.08 % of water on earth is available to humans as fresh water (rivers, swamps, lakes). The rest is locked in oceans, ice caps and glaciers.
-  Ways in which we pollute water.
-  Water in large cities is scarce. How could rainwater be collected from roofs? Would this reduce shortages?
-  Find out how much rain falls in your city.
-  Where does all this water go and does it become polluted?
-  Calculate the square area of the roofs of buildings in your school.
-  How much water could be collected here? How much can be stored in existing water tanks? Can new tanks be constructed safely?

AIDS: Rain gauge, sponge.

BLACKBOARD: ○ List ways in which the school uses water (washroom taps and WCs, labs, washing floors, cleaning cars, washing clothes, sheets). ○ List ways in which water can be saved. ○ Sketch of school roof tops. Suggested drawing plan to collect and store this water.

EVALUATION: ○ Why is water so precious? ○ Why is the tiger considered a ‘water god’? ○ What are you personally going to do at home/school to save water?

ACTIVITIES:

-  Design a “Save Water” campaign for the school (include water-saving strategies for taps, flushes, gardens).
-  Write out a project with sketches and floor plans for a roof-top water-harvesting scheme for your school.
-  Where does your city’s water supply originate? (Mumbai gets water from the National Park at Borivli and from the Tansa Wildlife Sanctuary. New Delhi wants water from a dam that will drown the Renuka Wildlife Sanctuary.) If all the buildings in your city practised water harvesting and water conservation, would the city’s water problems be reduced?
-  Conduct a water audit of the school. How many taps are leaking? Does the laboratory clean its wastes, or dispose chemicals directly into drains?
-  Take two glasses of water. Pour one on a sponge. Pour the other on the floor. Now squeeze the water from the sponge back into one glass. Forested lands act like sponges. After the four-month monsoon they release water, like the sponge, for use through the year.
-  Make a scale model of the physical features of the watershed that supplies water to your city. Include forests, rivers, pipelines, large lakes.

“I am convinced that in children we have a real force, not a notional one. Not only will the kids we reach out to soon be in charge of the world, but we simultaneously communicate with their parents, friends, teachers and the communities in which they live.”

Mr. Sunil Alagh, MD & CEO, Britannia Industries Ltd.
