

Topic	Environment
Phenomenon	Water pollution
Experiment	When plants drink
Material to be provided	1 piece of filter paper 1 bottle of ink 1 measuring cup
Additional Material	water
Preparation for experiment	none

Researcher question

What does contaminated water do to plants?

Description of experiment

Ask the children if they know what plants feed on. The children are bound to bring up the fact that plants need water to live and grow. Ask the children whether they have any ideas about whether plants also drink dirt that is mixed up in the water. Is polluted water good for plants? Also ask the children how they feel about the water they drink.

Fill the measuring cup with water and have the children help you dye the water with the ink. Ask them to roll up the filter paper and place it in the water to act as a flower stem. What can you observe? What happens to the color of the filter paper?

Explanation

You can see how the paper absorbs the dyed water and gradually changes color.

Plants absorb water from the earth through their roots. From the roots the water travels through the stem to the leaves and flowers. This path can be made visible with the dyed water. Help the children to understand that polluted water does not do the plants any good and can even harm them.

Further ideas

Alternatively, you can also take flowers and plants with clearly visible white petals. Cut the stems off short and get the children to help you place the flowers or plants in colored water. Watch together to see what happens to the blossoms. The blossoms take up the color faster if the flowers do not come directly out of a vase and are really thirsty.

