



SPRING | Absorption Satisfied vs. Soaked: Too Much, Too Little, Just Right

Summary:

Water is essential for garden growth but too much rain can drown plants and cause other problems. Finding the right balance of water is part of the garden learning process. We will explore some simple ways of testing how much water our garden needs.

Before Visiting the Garden:

Gather: Notebook for observations, pencil, ruler

Explore: “Zero-Nine, 1958/59” by Jasper Johns: Do you recognize the numbers in this painting? Do they look like they had some water spilled on them?

Read: *All the Water in the World* by George Ella Lyon and Illustrated by Katherine Tillotson

In the Garden:

Our job, as gardeners, is to make sure that our plants are staying happy and healthy. Water is essential in helping our gardens to grow and flourish. It is our job to observe and discover how much water is the right amount of water to keep our gardens healthy. If our gardens don't receive enough water, our plants will dry out. If they are overwatered, they could drown. There are some simple ways that we can test the soil to make sure that it is receiving the right amount of water.

Questions to Explore:

- How much water do you think is the right amount of water for plants to grow?
- What do you think the dampness of the soil tells us about the health of our plants?
- How can we tell if our plants are receiving the right amount of water? What observations can we make?

Activity:

Brainstorm some ways that you think we could test to see if the garden is receiving enough water.

1. There are two very simple ways that we can tell whether or not our garden is getting enough water. The first is to stick your finger in the ground and observe what you feel. Is the soil moist and soft or hard and dry? If it's dry, then it needs a good watering. If it is very moist and the soil feels wet, then it has been watered plenty!
2. Use your ruler and stick it into the ground. Push it gently down into the soil. When you pull it up is the ruler muddy or wet? If the soil is wet deep down, that means the garden has been watered well!
3. Also check the leaves on plants. Are they green and strong or are they drooping and brown? If they are drooping, they might not be receiving enough water.
4. Record your observations in your journal and check back next week to see how your plants are doing. It might take a few weeks to figure out just the right amount of water. (Make sure you're checking the weather too. When it's hot you might need more water!)

Beyond the Garden | Explore Absorption in the Backyard or Bathroom!

The type of soil that we have in our garden determines whether or not our plants will be able to absorb the water we give them. We can experiment with different materials around the house to see what is absorbent, soaks up water, and what is repellent, pushes water away.

- Fill the bathtub or a kiddie pool with a small amount of water and grab some materials, such as a washcloth, a plastic bag, a cork, a rock, a piece of bread and whatever else you want to test and drop into the water. Sort your findings into two piles, soaks up water and repels water!

Continue Exploring | Supporting Materials

National Parks Hydrology for Kids: <http://www.nps.gov/brca/learn/kidsyouth/hydrokidspage.htm>