



Plants Need a Drink!

Students Role-Play Plant Behavior

Students gather outside for a role-play about plants that need water. Several narration options are provided for the educator to facilitate this kinesthetic learning activity.

GRADES PREK, K-2

SCIENCE, DRAMA

ROLE-PLAY

NO TOOLS REQUIRED

Introduction

Young students love to learn through role-play. Scenarios about plant water needs in a variety of situations provide an engaging and active introduction to plant needs for survival, plant parts, and ecosystem interrelationships. Students also develop a stronger connection to their school's plants and are inspired to be better stewards.

Instructions

Gather students in a circle, either seated or standing. Ask children to demonstrate with their body what they think a thirsty plant would look like. Teachers can also demonstrate being a tree or other plant by holding their arms up as branches/stems and their hands stretched out as leaves. Below are several possible narratives that an adult can use or adapt as needed.

Narration 1: *"It is a very sunny, hot day and the plants used up all their water. They are thirsty. They are starting to WILT and look droopy."*

Bend your whole body to one side or bend your leafy hands at the wrist.



A student role plays wilting like a plant without enough water.

Narration 2: “Some children helped the plants by watering their roots. Now the leaves and stems are perked up and straight and strong again.”

Hold your body and your hands up again. A child or an adult can roam around, pretending to water imaginary roots by tapping students’ shoes.

Narration 3: “Wow, it is a windy day, blowing you side to side. Remember your roots can’t move. The wind blows away and evaporates some of the water in your leaves. Now you don’t have enough water. Start drooping.”

Narration 4: “It started raining. What a relief. Your roots drink up the water and your trunk takes it up to the leaves. You can stand up strong and healthy again. Grow some new leaves.”

Narration 5: “Children always remember to water you on hot, sunny days. You grow taller and taller.”

Narration 6: “Freezing temperatures are coming. Some trees dropped all their leaves since they can’t drink frozen water. Evergreen trees kept their needles, which are very skinny leaves that don’t freeze. Choose which tree you want to be.”



NATIONAL SCHOOLYARD FOREST SYSTEM

The National Schoolyard Forest System™ seeks to create schoolyard forests on PreK-12 public school grounds across the country to directly shade and protect students from extreme heat and rising temperatures due to climate change. This initiative was founded by Green Schoolyards America, and launched with California as the first state in partnership with the California Department of Education, the California Department of Forestry and Fire Protection, and Ten Strands.

For more information, visit:
greenschoolyards.org/schoolyard-forest-system



Extensions

1. Include other elements. These role-play scenarios can be continued with many more elements that incorporate classroom topics of study, such as life cycles, seasons, pollinators, and habitats. For example, students can model the tree developing flowers, growing fruit, being visited by animals, being nested in by birds, and providing shade to all the children and animals.
2. Water plants. Students go outside to water plants and to observe trees and other plants to determine whether they are wilting, have browning leaves, or look well-watered.

NEXT GENERATION SCIENCE STANDARDS

Disciplinary Core Ideas

- From Molecules to Organisms: Structures and Processes
- Ecosystems: Interactions, Energy, and Dynamics
- Earth and Human Activity

Crosscutting Concepts

- Cause and Effect
- Systems and System Models
- Structure and Function

Science and Engineering Practices

- Developing and Using Models
- Obtaining, Evaluating, and Communicating Information

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