

# Puddle Science

Inspired by *Worm Weather* by Jean Taft

**Goal:** Investigate how rain creates puddles and explore how water behaves on different surfaces.

## You will need:

- A large tray or baking sheet
- Different surface materials (e.g., wax paper, paper towel, sand, plastic wrap, foil)
- Water
- Small cup, squeeze bottle, or spray bottle
- Food coloring (optional, for visual effect)
- Paper and markers for drawing observations

## What to do:

- Lay out the different materials on the tray, each in its own section. Explain that these represent different surfaces where puddles can form.
- Use the small cup, squeeze bottle, or spray bottle to “rain” on each surface, one at a time. Encourage your child to observe what happens when the water hits the different materials.
  - Does the water soak in (like it would in soil, grass, or your clothes)?
  - Does it form a puddle (like on the sidewalk or playground equipment)?
- If you’d like, add a drop of food coloring to the water to make it easier to see.
- Ask your child to draw pictures of what they observe on each surface.

## To think about:

- Ask questions like: "Why do some surfaces soak up the rain while others make puddles?" and "What surfaces do you see puddles on when you go outside?"
- Try using warm water and cold water to see if the temperature changes how the water behaves on the surfaces.
- Use outdoor objects like a rock, a leaf, or dirt in a small container to mimic surfaces you might find outside. Compare these to the materials in the tray.
- Experiment with creating puddles outdoors and watch how they change over time. Do they get bigger, smaller, or disappear?



