

STEM

starts now

Absorption

Recommended Age: 25–30 Months

STEM concepts: Science (physical science), technology (simple tools), math (number sense and operations)

Materials: magnifying glasses, eye droppers or medicine syringes, small container of water, plastic tray or baking sheet, materials to test absorption (paper towels, paper plates, coffee filters, cotton balls, foil, wax paper, sponges, plastic lids, plastic toys, Q-tips)

What to do: Collect items for testing and examining. Your child probably has never seen an eye dropper before so model how to use it for them. If necessary, model how to use the syringe also. Fill the plastic container with water and place the container on your tray. Place one or two items at a time on the tray. Have your child examine the different items and explore them with the magnifying glass. Ask them which item they think will suck up or absorb the water. Write down their guesses. Have your child drop water onto the items and compare the results with what they guessed. Once the water is dropped onto the items have your child reexamine the items using the magnifying glass to take a look at the water and the differences from before they were wet. Line all of the items, once they are wet on the tray. Count the number of objects that absorbed the water and did not absorb the water.

Language and Communication: Explain what absorption is with your child. Explain that it is when one material takes up another one. Ask your child which objects would absorb the water, and which would not. Ask them to describe what the objects feel like before they are wet. Once they are wet ask them to describe what they feel like wet. Ask them if they look different. If your child doesn't have an answer, encourage them with words like smooth, wet, dry, rough, bumpy, bright, dark, etc.

Expand the Activity: Add a few drops of food coloring into a small container of water. Ask your child to make a prediction about what might happen as they add a second color to the water. Have them drop the colored water on the absorbing materials. (Food coloring will stain.) Examine what happens with colors.

