



# Science

## How can so much fun teach STEM skills?

Experiments help children develop basic science skills like observing what is happening, using words to describe what they notice, and repeating the action to compare results. Questioning and posing answers are skills used every day in the classroom.

### Try these Activities!

- **Air can move things.** Ask your children to blow air on their hands and to wave their hands in the air. Ask them, “What do you feel?” and “Can you hold air?” Line up floating toys in water. Use a straw to blow a toy across the water. Repeat the activity. Ask, “What happened when you blew on the toy?”
- **Bubbles have one shape.** In a bucket or tub, make a bubble solution with dish soap. Using a variety of oddly shaped objects—such as cookie cutters, a loop of string, and a straw—teach your children how to dip their object in the water and blow through it to make a bubble. Experiment with blowing *fast* and *slow*. Ask, “Which method works better?” Have students look at the shape of the bubble maker before they use it. Ask, “What shape do you think the bubble will be?” No matter what shape the object, the bubble will always be round due to liquid surface tension.
- **Shadows have changing shapes.** Outside on a sunny day or inside a darkened room with a flashlight, create a shadow and ask children, “What do you need to create a shadow?” The answer is a light, an object, and a place for the shadow to fall. Explore the shape of a shadow by moving the light *closer* to the object or *farther* away from the object. Keeping the light steady, move the object closer or further to the wall or floor. Using chalk on the sidewalk, outline the shadow of a hand, arm, or whole body.



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## Tell Children:

- “What happened when you blew on the toy?”  
“What happened when you made a bubble?” Encourage kids to use descriptive words like *faster* and *slower*.
- “What will the shadow look like with your hand close to the ground? Will it have sharp edges or fuzzy edges?”  
Ask “what” questions so kids can predict what will happen.
- “Do it again. What was different the second time?”  
Open-ended questions like this will help kids compare results.

## Tell Parents:

Today we explored air, bubbles, and shadows. Find a flashlight at home and ask your child to tell you about shadows.

## Brain-Building Connection:

By providing guidance and assistance and letting kids figure out what happened, you help them understand cause and effect and build their observation and prediction skills.

## Read All About It:

*I Wonder Why the Wind Blows* by Anita Ganeri

*Fun with Water and Bubbles* by Heidi Gold-Dworkin and Robert K. Ullman

*Nothing Sticks Like a Shadow* by Ann Tompert



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