UAMN Virtual Early Explorers: Water

Sink or Float

Create a sensory water and science experiment!

Always supervise young children around water.

Materials Needed:

A bin or sink filled with water, various household objects including ones that float (feather, Lego, bath toy, crayon, ping pong ball, plastic utensil, pencil, etc.) and ones that don’t float (toy cars, coins, metal spoon, eraser, dry pasta, pipe cleaner, etc.), towel.

Instructions:

Step 1: Set up the activity by gathering various household objects. Spread the objects onto a towel. Fill a bin or sink with water.

Step 2: Drop objects into the water. Explore what sinks and floats. Discover with your child. “That one went to the bottom!” “That one stayed on top!” “I wonder what that spoon will do?”

Optional Step: Ask older children to make predictions about what might sink or float. With younger children, encourage open-ended discovery instead.

Extensions:

- Try liquids (for example, corn syrup or oil).
- Try modelling clay or play-doh. Change its shape and see if you can make it float (try a bowl shape).

This sensory experiment encourages children to be curious, observe closely, and notice patterns. Introduce your child to the same kind of curiosity that drives scientific discovery!
Density and Shape

Discover the physics of sinking and floating!

**Density** is one of the reasons things float or sink. Everything in the world, including water, is made up of tiny particles. In every kind of material, those particles are more or less packed together. This makes them more or less dense. Things that are denser than water will sink, and things that are less dense than water will float.

*Imagine the blue dots are particles. How packed together do they look?*

- **Wood**
  - The wood logs are less dense than water, so they would float.

- **Water**

- **Metal Spoon**
  - The metal spoon is denser than water, so it would sink.

Shape is also important for floating. A heavy boat with hundreds of people and cars onboard can float because it has the right shape!