STEM starts now

What Floats?

STEM concepts: Science (buoyancy), Math (counting, measurements)

Materials: A tub or bin, water, various toys, rocks, buttons, a sponge, various sizes of cups

What to do: Fill either your bathtub or a bin with water. If you are using a bin, it is suggested that you either put it on a tiled floor space or put a tarp underneath it, because there may be some splashes! Lay out a variety of toys or objects and let your child place them in the water. See if they float or sink. If your child has a toy boat, have him place it in the water. Put small rocks or buttons onto the toy boat with him. See how many can fit on the boat before it sinks. If you do not have a toy boat, you can make one out of aluminum foil. To do this, you can take a sheet of aluminum foil and fold up the sides to create a square-shaped boat.

Language and Communication: Before putting something into the water, ask "Do you think this will sink or float?" Your child may just be guessing, but this helps to establish the skill of making educated guesses, which is a fundamental science concept. When something floats, be sure to say "That floats!". When something sinks, say "That sinks!". This will help your child to begin to understand buoyancy. As you put rocks or buttons onto the toy boat, count out loud to encourage your child to count with you.

Expand the Activity: Introduce a sponge into the water play. Let your child explore water absorption by squeezing the sponge and filling it up with water again. Another way to expand this activity is to have your child play with cups in the water. Filling up different sized and shaped cups and dumping them back into the bin or tub can introduce the fundamentals of volume, weight, and measurements!