

Science at Home

Are you looking for something to do to keep your brain active and engaged? We're here to help with Science at Home! You can conduct these fun science experiments using commonly found items. You can also visit us at the Museum's [Science at Home](#) page for additional resources.

Experiment: A Water Balancing Act



Materials Needed:

Table salt
Spoon
Container of water
Red and blue food color
2 clear plastic cups
Large baking pan
Dish towel or paper towels

What We've Learned

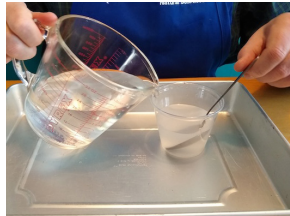
Freshwater is able to "float" on saltwater because saltwater is more dense: it contains water molecules like freshwater, plus sodium and chlorine ions.



Instructions:



Step 1: Place one table-spoon of salt in one of the empty cups.



Step 2: Fill one cup between 1/2 to 2/3rds full with water.



Step 3: Place several drops of red food color into the same cup and stir well.



Step 4: Fill the second plastic cup about half full with water and add a few drops of blue food color, then stir. Note: do not add salt in this cup!



Step 5: Slowly and gently, hold the spoon on the surface of the saltwater while touching the inside of the cup. Drip the blue water onto the spoon. Note: It is important to do this slowly to keep the freshwater from mixing with the saltwater.



Step 6: Continue to add the blue fresh water in this manner until you've reached the top of the cup. Step back and admire your creation!

Natural Connections

Imagine you're a captain of a ship sailing from one sea to another or moving from a large body of freshwater to the ocean.

You would need to be careful to load your cargo to reflect the different densities between these bodies of water. Failure to do so could — and has — ended up in ships capsizing.

A ship in saltwater will float higher than one in freshwater. Just like you will!

Having Fun?

We want to see! Tag [@naturalsciences](#) on social media, so we can see you and your loved ones enjoying our Science at Home experiments.