

# Neutral Buoyancy Challenge



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Now that you have found out which objects sink and float, can you create a device that floats somewhere in between the surface of the water, and the bottom of the container?

## Materials:

- A bucket, bowl or container (Your bathtub will work!)
- Water
- Small objects that sink (can be found inside or outside)
- Small objects that float (can be found inside or outside)
- Rubber band(s)



## Directions:

1. Fill up a bucket, bowl, bathtub, or other container with ~12 inches of water.
2. Find an object that floats, and an object that sinks.
3. Try attaching one item that sinks, and one item that floats together using a rubber band.
4. Place the object in the water. What happened?
5. Try attaching another combination of objects (one that sinks, and one that floats). What happens?
6. Keep testing new combinations. Can you attach more than two things together? Can you use different sized objects?
7. Challenge: Try to find a combination that floats in the middle of the water (i.e. doesn't touch the bottom of the container, but doesn't touch the surface of the water, either)? You have achieved neutral buoyancy!

