

A STEM in the Park

Take Home Activity

STEM

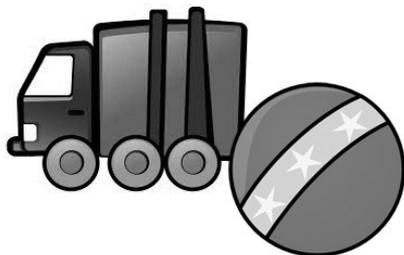
in the **PARK**™

Science, Technology, Engineering, and Mathematics

Does it Float?

What You Need

- A bowl or bucket of water
- Several different small objects or toys



What To Do

1. Before placing each item into the water, predict if you think it will sink or float.
2. Then, gently place the item into the water and observe it for a few seconds to determine if it sinks or floats. Take it out of the water and place into one of two piles: a sinking or floating pile.
3. Next, repeat this process for the remaining objects.

Continued on back

Observe...

What characteristics do the floating objects have in common?

What characteristics do the sinking objects have in common?

Can air be trapped in any of the objects?

What do you think makes an object float?

Learn...

Buoyancy - the ability to remain afloat

Mass - amount of force required to move an object (similar to its weight)

Density - the amount of mass per unit of volume (how compact the mass is)

Volume - amount of space that is occupied

The Science:

In order for an object to float, it's density must be less than the density of water that is being displaced. It has something to do with it's weight, but it also depends on it's shape and how the weight is spread out. Heavy objects can float if they have a large enough volume.

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