

CURIOSITY AT HOME

SINK OR FLOAT



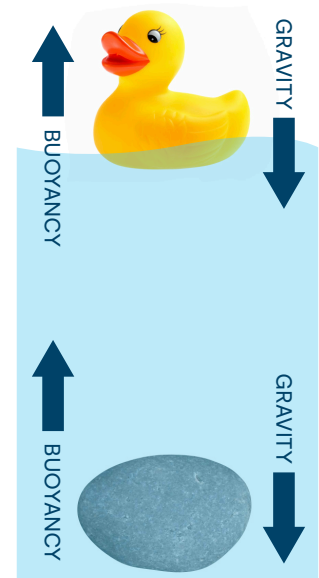
Explore buoyancy by playing Sink or Float.

Buoyancy is the upward force of a fluid (liquid or gas) on an object that is fully or partially submerged in the fluid.

Gravity is the downward force of a body or planet (Earth) has that pulls objects towards its center.

MATERIALS

- Tub or pan of water
- Objects that are safe to be placed in water



Experiment continued on next page...



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3–5 GRADE EXPLORATION

Explore how the mass and volume of an object affect if an object will sink, float, or hover in the water.

Find 5–6 objects with the same mass (g) that are safe to be placed in water. (If you don't have a scale, you can download a digital scale app that will weigh objects up to around 100g.)

Objects of the same weight

Mass of objects in grams _____

Object	Prediction	Observations

Find 5–6 cube or cuboid objects that are approximately the same volume (cm³) that are safe to be placed in water. (Volume of a cubes or cuboids = $l \times w \times h$)

Objects of the same volume

Mass of objects in cm³ _____

Object	Prediction	Observations

Experiment continued on next page...



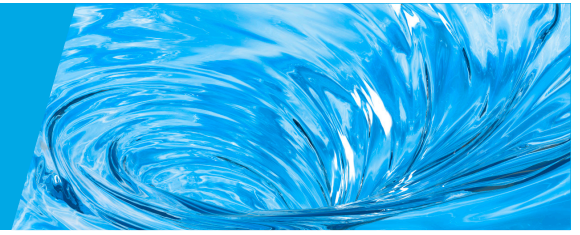
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3–5 GRADE EXPLORATION – CONTINUED

Do all objects that weight the same behave the same?

Do all objects with the same volume behave the same?

How do mass and volume relate to each other to determine if something sinks or floats.

Can you find any objects that hovers in the water (neither sinks nor floats)? How do you think the mass and volume of hovering objects relates to the mass and volume of the water?



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