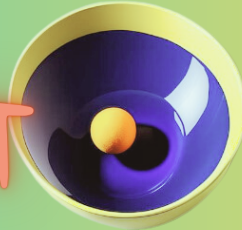




# UMMAHLIT



## SINK OR FLOAT



### SCIENCE EXPERIMENT

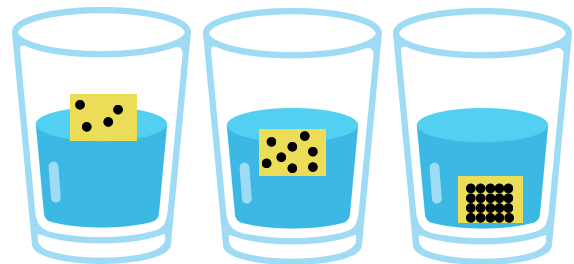
#### INTRODUCTION

Understanding how objects behave in water can be very useful information... Sometimes you may want an object inside of water but sometimes NOT! If you drop your favorite toy in a pool of water, what will happen? Will it "float" (stay on top of the water) or "sink" (go to the bottom of the water)?

There are many things to consider when exploring if an object floats or sinks in water. In this experiment we will focus on **DENSITY**.

**Density** is how heavy something is compared to its size. Two objects can have the same weight but different sizes, so different densities.

When an object is **LESS** dense than the water it **FLOATS** and if it is **MORE** dense then it **SINKS**.



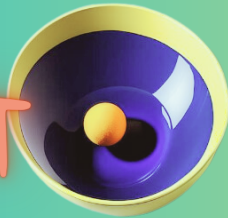
Imagine the black dots mean density; the more dense, the more it sinks.



# UMMAHLIT



## SINK OR FLOAT



### SCIENCE EXPERIMENT

#### INTRODUCTION

There are many things to consider when exploring if an object floats or sinks in water. In this experiment we will focus on DENSITY!

#### PREPARATION

1. Find an assistant (adult helper)
2. Get bowl of water
3. Pick 3 objects that can fit in the bowl
4. Get pencil to write

#### INSTRUCTIONS

1. Write the name of the object
2. Circle your hypothesis (do you think the object will float or sink?)
3. Place the object in the bowl
4. Observe and circle the density result (did the object float or sink?)
5. Review and discuss conclusions

### IT'S TIME TO BEGIN THE EXPERIMENT!

OBJECT NAME	HYPOTHESIS		DENSITY RESULT	
	<b>FLOAT</b>	<b>SINK</b>	Less Dense (Floated)	More Dense (Sank)
	<b>FLOAT</b>	<b>SINK</b>	Less Dense (Floated)	More Dense (Sank)
	<b>FLOAT</b>	<b>SINK</b>	Less Dense (Floated)	More Dense (Sank)

#### DISCUSSION QUESTIONS

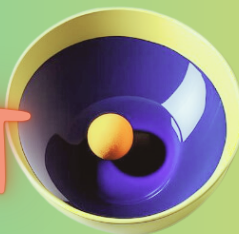
- What did you learn from this experiment?
- Were you surprised that some objects are denser than water?
- What new questions do you have after doing this experiment?



# UMMAHLIT



## SINK OR FLOAT



### SCIENCE EXPERIMENT

#### CONCLUSION

**We can do many more science experiments to learn more about density!**

- What happens if one side of an object is more dense than the other side?
- What happens if we use a bigger bowl of water and do the same experiment?
- What happens if we use another liquid like oil instead of water?
- What happens if, instead of experimenting with liquids like water, we see how density behaves in air?

**The knowledge we learn from density helps us to...**

- Build ships that can move on top of the ocean...
- And submarines that can move inside the ocean...
- And hot air balloons that can move in the sky...
- And so many more cool things!

