

In this experiment you will be determining different densities of materials and determining if they will sink or float in water. Density is a key principal in marine science because it explains the location of the ocean and how water columns behave, so we need to practice using it and understand it. This will lead into understanding of how the ocean works.

Things to remember:

$$D = \frac{\text{mass (g)}}{\text{Volume (ml)}}$$

The density of water is equal to 1

$$1 \text{ cm}^3 = 1 \text{ ml}$$

The volume of a sphere is $V = \frac{4}{3}\pi r^3$ make sure to use cm for your radius.

The volume of a cube is (L)(W)(H) = V make sure to use cm for your measurements here also.

Sample	Mass	Diameter	Volume	Density	Sink/Float
Green Sphere					
White Sphere					
Orange Sphere					
Purple Sphere					
	Mass	L, W, H	Volume	Density	Sink/Float
Wood Cube 1					
Wood Cube 2					
Wood Cube 3					
Aluminum					
Steel					
Brass					
Copper					
Clear Plastic Cube					
Yellow Plastic Cube					
Grey Plastic Cube					

When you have completed your calculations, write a laboratory report that includes: Purpose, Procedure, Results, Discussion, and Conclusion sections. Remember to reference your rubric you used last class to see how this will be graded and what you should do to obtain the grade you want.