PHYSICS DENSITY WORKSHEET

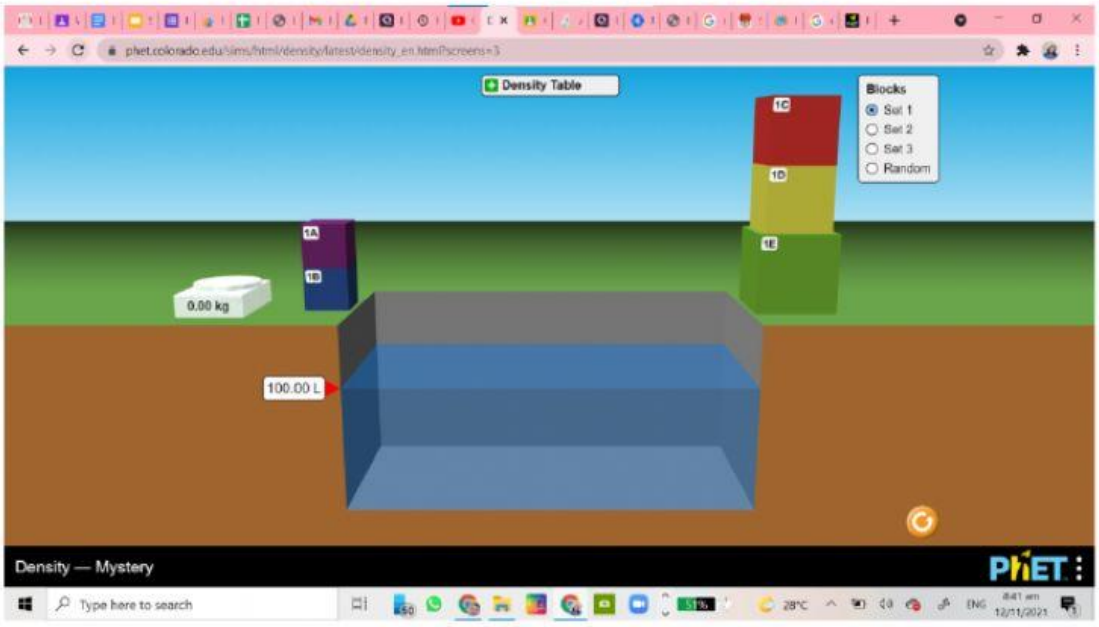
DATE: November 12, 2021

ASPECTS COVERED:

- Finding density, given mass and volume
- Transposing the density formula to determine mass or volume
- Determining the material of an object by its density
- Determining relative density of an object (calculations and worded statements)

PhET Simulation:

https://phet.colorado.edu/sims/html/density/latest/density_en.html?screens=3



Prepared by Betty Ann Harvey November 2021

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Instructions:

Use the link provided to access the simulation (you should be on the mystery screen).

Once on, set your blocks to set #2.

- Use the scale given to measure the mass of each block.
- Drop each block into the water to determine its volume by water displacement principle.
- Note the values in the table below:

Block	Mass (Kg)	Volume (m^3)	Density (Kgm^{-3})	Material	Relative Density (Compared to Water)
2A					
2B					
2C					
2D					
2E					

NB: Use the density table copied below to determine the material each block is made of.

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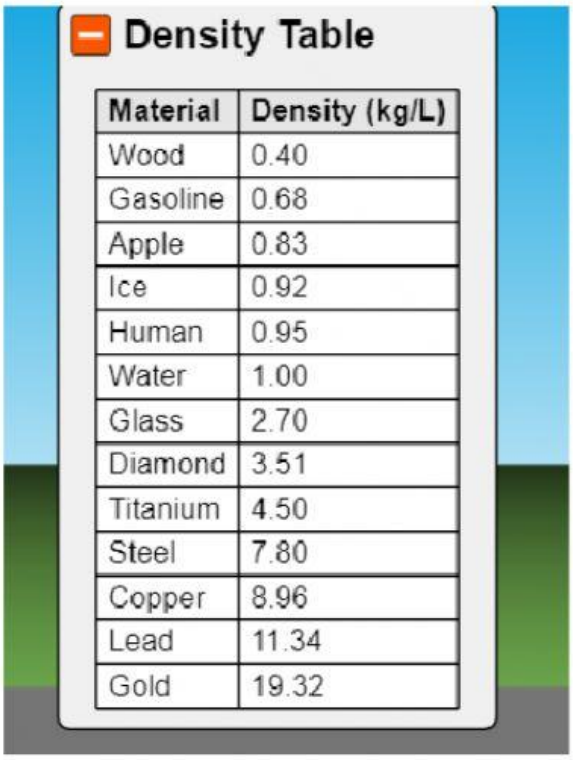


FIGURE SHOWING DENSITY TABLE COPIED FROM THE DENSITY SIMS

1. Did any of the blocks float or sink? (Specify)

_____

_____

_____

2. Hypothetically speaking, why did the blocks float and / or sink?

_____

_____

_____

_____

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Activity 2 Relative Density

Compare the densities of your blocks to obtain relative density.

1. Block 2A and Block 2E

_____

2. Block 2C and Block 2D

_____

3. Block 2B and Block 2E

_____

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