Unit C1 Enrichment Activity

This is an activity to work on **when you are finished with everything we are doing in this unit**. You can get 5 bonus points by completing this assignment at the end of the unit. However, you will not get any bonus if you have any missing assignments for the unit. Other assignments and test corrections are always more important than the Enrichment Activity!

1. Go to the Density PhET Lab at `https://phet.colorado.edu/en/simulations/density`. Play with the simulation and write down three observations:

2. Go to the "Mystery" tab. Choose Block Set #1. Come up with a procedure to measure the density of each of these blocks, and explain your procedure below.

3. Use your procedure to find the density of all the blocks in Block Set #1.

Block	Mass	Volume	Density
1A			
1B			
1C			
1D			
1E			

4. Go back to the "Intro" tab. Pick wood plus two other materials (other than "custom"). Write down their densities in the data table below. Then, move the volume slider up and down. Write down the volume and mass for five different situations. Make sure your five situations are spread out over the whole range of allowable volumes.

Material #1: Wood

Density: _____

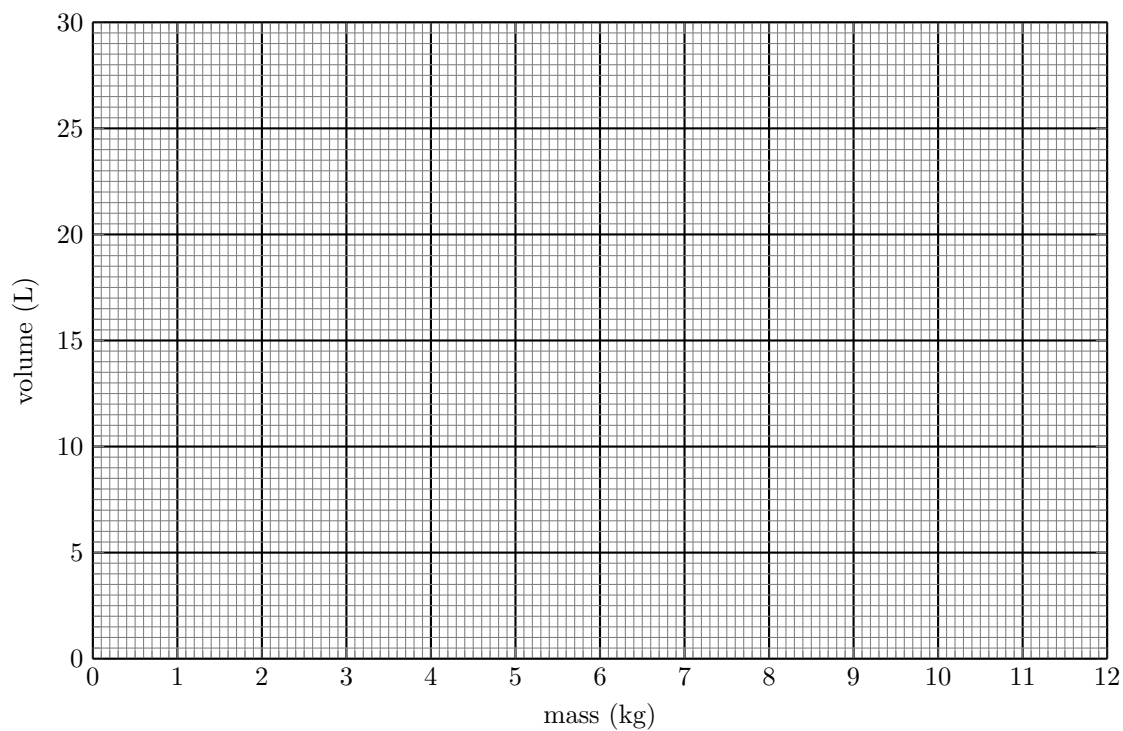| volume (L)	mass (kg)
1.00	
3.00	
5.00	
7.00	
10.00	

Material #2: _____

Density: _____

volume (L)	mass (kg)

Material #3: _____

Density: _____

volume (L)	mass (kg)

5. Make a graph of the mass vs. volume for each of these materials. Plot your points with dots. Then connect the points with three different colors.

6. Draw some conclusions. How does the graph of an object's mass and volume correspond to its density?