Unit 2 Extra Credit
Based on Unit 1 and 2

Use the following formula to solve questions 1 - $$D = \frac{M}{V}$$

Property	Unit of Measure
Mass	
ENERGY/HEAT	
Weight	
Distance	
Density	
Volume	
Specific Heat	
Temperature	
Δ	
Force of Gravity	
1,000	
One-hundredth	

Word Bank: *Change; kilo; Liter; Meter; Gram; Celsius; mass per unit volume; Joule; meter per second squared; centi; joules per gram degree Celsius; Newton*

1. J'Vion is studying a new material he is interested in trying to construct a hard hitting subwoofer out of. The polycarbonate type material has a mass of 464 grams and a volume of 232 cm³. What is the Density of this speaker material?

2. Ms. Contreras is attempting to find a make-up product that gives her the same natural feeling as not wearing make-up at all. She must first determine what mass of her current make-up is she applying. She currently uses about 1.5 mL of make-up. And the density of her make-up is 0.25 g/mL. what mass of make-up is she currently applying?

3. Have you ever struggled with trying to figure out exactly how much of something you should? Well young Mr. Pritchett hates to waste excess soda pop, he is not a wasteful person and quite frankly, doesn't want to waste the money. He enjoys mountain dew, but always has left over when he buys a liter bottle. He knows that the perfect amount of Dew for his tummy is 775 gram, but as we all know Mountain Dew is sold in liters, so this isn't very helpful. Mr. Pritchett researched the delicious satisfying Mountain Dew and discovered the its density to be 1.55 g/mL. Which size drink (volume) does Mr. Pritchett need to buy to still be satisfied, and have no excess. Solve for the volume. _Your answer will be in mL because the density units given are (g/mL). After you solve for V, you will need to convert from mL to L._

4. What is the density of the irregular shaped rock shown in the image? Ms. Trawick measured it on a scale for you, and identified the mass to be 247 grams. Use the beakers and your knowledge of the water displacement method to find the volume so that you can solve for the density.
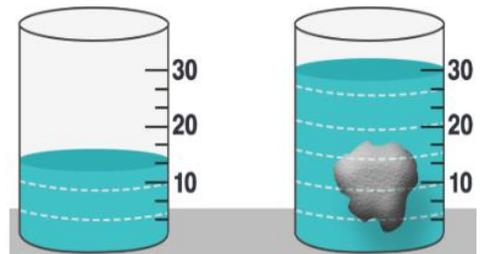
DIRECTIONS: **PUT A CHECK MARK UNDER THE APPROPRIATE HEAT TRANSFER METHOD FOR EACH PROPERTY/PHENOMENA. THERE ARE TWO ROWS THAT WILL HAVE MORE THAN 1 CHECKMARK**

PROPERTY/PHENOMENA	Conduction	Convection	Radiation
THROUGH SOLIDS			
THROUGH FLUIDS			
THROUGH VACUUM			
HEAT RISES & COLD SINKS			
ELECTROMAGNETIC WAVES			
ATOM TO ATOM			
BOILING WATER			
HOT SPOON IN SOUP			
SUN HEATING EARTH			
MICROWAVE			
FEET GET HOT ON ASPHALT			
WATER CYCLE (EVAP. THEN RAIN)			

DIRECTIONS: *Put the states of matter in order of High, Med., Low for each property, unless otherwise specific such as Yes/No)*

Property	Solid	Liquid	Gas
ENERGY			
Degree of Freedom			
Density			
Temperature			
Intermolecular Forces			
Definite Volume **(yes/no)**			
Compressible **(yes/no)**			
Definite Shape **(yes/no)**			