Earth Science Chapter 3: Using Density to Determine the Mineral Lab

*There are a group of minerals that need to be identified based on the identifying characteristic of **density**. In order to determine the density of a mineral, it must first be massed on a scale and then its volume must be determined. Volume is easiest to determine by figuring out how much water is displaced when the mineral is placed in a glass of water. Watch the in-class demonstration to better understand this part of the experiment. For the pre-lab, answer the following questions:*

1. Define density _____

_____

2. Write the mathematical formula. Density =   _____

3. Calculate the densities for the following minerals. Show all work.

	Pyrite	Quartz	Galena
Mass of mineral (g)	23	14	8
Volume (mL)	4.6	5.4	1.1
Math work			
Density (g/mL or g/cm^3)			

4. Order the minerals from **highest** density **to lowest** density

    A. _____ **HIGHEST DENSITY**

    B. _____

    C. _____ **LOWEST DENSITY**