Abstract

This experiment was performed to be introduced to measuring density and volume by displacement and using Vernier calipers. Throughout this experiment density of various metal spheres was measured by observing water displacement and measuring the diameter using Vernier calipers. Also, the densities of a hard-boiled egg and raw egg were measured by mixing salt with water until the eggs "crowned" the surface or just barely floated in the water. There were four different metal spheres and each of them larger than the last, which meant that each of their densities were different. When the masses and volumes were graphed, it was observed that they both followed a positive trend line; however the densities were different when using the calipers even though they were the same metal spheres. Therefore, the data collected with the spheres was not consistent within the experiment. The eggs, however, had relatively similar densities.