

Determining the density of various liquids and solids essay sample



**ASSIGN
BUSTER**

The purpose of this experiment is to determine the weight (density) of certain liquids and solids in chemistry. These liquids include; Water, Hexane, Carbon Tetrachloride, and solids include; Copper, Zinc, Lead and, Aluminum. It's important to know the weight of these products so you can properly conduct experiments and make clear observations. Different techniques will be used to determine these densities and one in particular is mixing the liquids in different proportions to compare the accuracy and precision of your calculated densities to the initial in text values. The reactions being used in this experiment are the liquids and solids.

The following is a brief chronological listing of the procedures to follow while conducting the experiment. Collect your various liquids and solids and have them separate and labeled. Look up textually the initial amount of how much liquid and gas to have when conducting your trials. Have an experiment sheet ready to record data. Determine the density of Carbon Tetrachloride (CCl_4) and Hexane (C_6H_{14}) in a mixture together and then separate the mixture into two proportions. Compare the accuracy and precision of your calculated densities to accepted initial values. When determining accuracy use absolute error and percent error, and for precision use absolute deviation and percent deviation. After you've done on trial do at least three more trials in order to observe precision in each trial. Before going on make sure all calculations are in order and that you've correctly stated the number and its significant figures. Arrange your data on a table and talk amongst your group members any findings that you see fit or relevant to mention.