

CHM 100 LABORATORY EXERCISE #2

Names:

ALWAYS RECORD PROPER SIGNIFICANT FIGURES AND UNITS ON THE DATA SHEET!

Part 1: Measure mass, volume, and length while creating a polymer.

1. Analytical Balance

Mass of calcium chloride
(record proper significant figures and units):

2. 100 mL Graduated Cylinder

Volume of water
(record proper significant figures and units):

3. Centimeter Ruler

Length of polymer created
(record proper significant figures and units):

Part 2: Calculate the density of an unknown metal solid via geometric measurements and calculation of the solid's volume.

Mass of metal cylinder	<input type="text"/>
Diameter of metal cylinder	<input type="text"/>
Length of metal cylinder	<input type="text"/>
Volume of metal cylinder	<input type="text"/>
Density of metal cylinder	<input type="text"/>

Part 3: Calculate the density of an unknown metal solid via water displacement measurement and calculation of the solid's volume.

Mass of metal cylinder	<input type="text"/>
Initial volume of water	<input type="text"/>
Final volume of water	<input type="text"/>
Volume of metal cylinder	<input type="text"/>
Density of metal cylinder	<input type="text"/>

Part 4: Calculate and compare the densities of a golf ball and salt water.

Golf Ball:

Mass of golf ball	<input type="text"/>
Initial volume of water	<input type="text"/>
Final volume of water	<input type="text"/>
Volume of golf ball	<input type="text"/>
Density of golf ball	<input type="text"/>

Salt Water (Salt solution)

Initial mass of empty beaker	<input type="text"/>
Final mass of beaker and salt solution	<input type="text"/>
Mass of salt solution	<input type="text"/>
Volume of salt solution	<input type="text"/>
Density of salt solution	<input type="text"/>

Observation of golf ball in salt solution: