

Finding the Density of Water

Materials:

1 clear plastic cup
1 triple beam balance
1 graduated cylinder
water

Procedure:

Measure the dry mass of your plastic cup using the triple beam balance. Record your result into the data chart in the correct column.

Pour a small volume of water into the graduated cylinder and measure its volume. Record your result into the data chart in the correct column.

Pour the water into the dry cup, and determine the mass of the cup and water using the triple beam balance. Record your result into the data chart in the correct column.

Repeat this procedure three (3) more times, making sure you have a different volume of water each time. Again, make sure you record your data into the correct spaces of the data chart.

When you have finished the four (4) trials, complete the chart, making sure that you do the correct mathematical calculations required for each column. Then, answer the question that follows the data chart.

Data Chart

Trial Number	mass of dry cup (grams)	mass of cup & liquid (g)	mass of liquid (g)	volume of liquid (ml)	density of liquid (g/ml)
1					
2					
3					
4					
Average (add the value of the four trials and divide by 4)					

Conclusion: What do you notice about the density of water?