Objective

The objective of this lab was to find and compare the densities of a diet and regular soda.

Diet Regular 0 5 10 ml ml Regular Soda Diet Soda ml ml g g 2.79 2.512 2.15 2.340 4.70 4.779 5.00 5.068 6.32 6.376 6.490 6.14 8.90 9.184 8.39 8.394 10.025 9.61 9.933 9.98

Results

1ml = 1.0261g

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1ml = 1.0113g
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Discussion

During this lab, we found that regular soda (1.0261 g/ml) is slightly denser than diet soda (1.0113 g/ml). This difference is likely due to the fact that artificial sweeteners (in diet soda) are far stronger than sugar (in regular soda), so less "heavy" sweetener is used in the diet soda in proportion to water. We used the same glassware and scale to measure each sample of soda, so there were no discrepancies in measurement precision.