|  |
| --- |
| **Q1: a)** **According to a recent survey, an average young adult consumes two 12-fluid oz. servings of a sugar drink every day. Estimate how many grams of beverage the average young person consumes per day. Also estimate how much sugar this average person consumes by drinking sugar drinks in pounds of sugar per year.** **Assume that an average sugar drink contains 11.5 % of sugar and that the average density of a sugar drink is 1.036 g/cm3.**  *Conversions: 1 fluid oz = 29.6 mL, 1lb = 0.4536 kg. Show all calculations including conversions.*  ***Sample calculation:***  ***Amount of beverage (in grams) a person consumes per day:***  ***Amount of sugar (in pounds) a person consumes per year:***  Answer : |
| **b) How do you compare with the average person in the sugar consumption? How many pounds of sugar per year do you consume?**  Answer : |
| **Q2:**  **If the density of beverage is measured at lower temperature (for example immediately after the drink is taken from a refrigerator and its temperature is 4oC), how would this issue affect your measurement of density and weight percent sugar in the beverage (make it significantly larger, slightly larger, significantly smaller, slightly smaller or have no effect)? Explain your reasoning.**  *Effect***:** *(make it significantly or slightly larger, significantly or slightly smaller or have no effect)*:  *Explanation*: |

Name: Bench #:

Lab day and section: