**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_**

**PROBLEM**

Determine the ratio of citric acid and baking soda to make a good tasting fizzy drink, or suffer the consequences of bad math**!**

**PRIOR KNOWLEDGE**

You should know how to:

* calculate a molar mass
* use molar mass as a conversion factor
* balance equations

**PRE-LAB**

1. Read about Fizzies Drink Tablets on the following website: <http://www.oldtimecandy.com/walk-the-candy-aisle/fizzies-drink-tablets> and write 2-3 sentences to summarize what you find.
2. How could you use chemistry to successfully recreate this olde-time candy?
3. Read through the materials list and Procedure 1. What safety rules are we breaking in this activity? Why is it acceptable for this lab?

**SAFETY**

* This lab involves food science. The utmost care should be taken that all food surfaces are clean and have not had contact with reagents.
* The products of this lab will be consumed; however, in any other situation chemicals should **NEVER** be taste-tested and food stuffs should not be brought into a laboratory.

**MATERIALS**

* 1. Wax Paper Dixie cups
  2. Paper muffin cups (or mini cups) Citric acid, H3C6H5O7
  3. Food beakers Baking soda, NaHCO3
  4. Spoons Sugar or sugar substitute
  5. Kool-aid Consumable water source
  6. Balance