**Solution Project**

In this activity you will learn how to use a virtual lab program to create a solution with a specific concentration as well as make a dilution. A standard operating procedure (SOP) will then be created to help any other student or lab technician create the same type of solution. You will be able to work in groups of no more than **three (3)** people to complete the lab activities but each student must turn in their own SOP.

Grading: (1) Pre/Post Lab Questions = 15%

(2) Solution Activity = 25%

(3) Dilution Activity = 25%

(4) SOP (Individual) = 35%

Directions: (1) Complete PreLab Questions

(2) Go to <http://www.chemcollective.org>

(3) Click on Virtual Labs

(4) Click on Stoichiometry

(5) Click on Glucose Dilution Problem

(6) Click on the Introductory Video to get acquainted with the lab

(7) Solve Activity #1. You must rename your solution and show your results

before you can continue to the next problem. (Glucose Dilution)

(8) Solve Activity #2. Duplicate your glassware before you start diluting with

water just in case you make a mistake. Rename your solution and show your results.

(Acid Dilution)

(9) Solve Activity #4. You must complete questions #1 and #3. You can solve #2 and #4

for extra credit.

(10) Download the SOP word document from my webpage and use it as a guide to fill

out the SOP for either question #1 or #3.

(11) Complete PostLab Questions

(12) Turn in Questions and SOP