Lab : Stock Solutions and Dilutions

Prelab Assignment

1. A chemist (very much like you), wants to dilute 50 mL of 3.50 M H_2SO_4 to 2.00 M H_2SO_4. To what volume must it be diluted. Explain.
2. Hydrogen Peroxide solution for hair bleaching is sold as 20 % by volume. A student purchases 500 mL of this, but he requires 5 % by volume, explain how he may achieve this dilution.

Purpose

The purpose of this lab is strictly to practice making up standard solutions and in diluting them.

Procedure

1. Calculate the mass of ???? necessary to make up 100.0 mL of 0.160 M solution.
2. Weigh out the required amount and prepare the required solution using a 100 mL volumetric flask.
3. When this solution is made, carry out the required dilution (I will give you this on the day of the lab).
4. Clean your pipette.
5. Write the names of the group members on a piece of paper towel and leave your two flasks on it in the designated area.

Calculations

Marks

You will receive a mark of 5:

1 For each of the solutions being the correct concentration. (I will do this by comparison with mine)
2 For the correct volume in the diluted solution. (Bottom of meniscus must be on the line)
1 For properly naming, with the correct formula and dilution of the solution ????

+ 5 For manipulative skills in the lab.

+ 2 for the Prelab Assignment

+ 3 for showing your calculations