Lemonade Dilution Lab

Use 12 fl oz can of minute made lemonade in this lab.

One can will serve approximately 12 people a 150 mL glass of lemonade. For a larger class double calculations.

Mix the contents of one can with 337 mL of water (674 for two cans)

Students will then be adding 100 mL for total volume of 150 mL.

Lemonade Dilution Lab

In this lab you will be using a stock solution of lemonade to prepare yourself a glass of lemonade that can actually be consumed.

Materials:

50 mL of 18 mol/L stock solution of lemonade provided by your teacher Measuring cups

*Note please be sure to only use the measuring cups and cups provided, do not use any glass lab equipment in this lab.

Procedure:

- 1) Obtain 50 mL of stock solution using a measuring cup and place it into a paper cup.
- 2) Obtain 100 mL of water in a measuring cup and use it to dilute your stock solution.

Questions

1) What is meant by the term 'stock solution'? What would you expect to taste stronger, the stock solution of lemonade provided by your teacher or the lemonade you will produce. (2 marks)

 In this lab you initially used 50 mL of stock solution. The initial concentration of your stock solution was 18 mol/L. You final volume was 150 mL. What was your final concentration of your lemonade? (5 marks) SCH 4C

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3) List two other times in everyday life that you may be required to use this calculation to dilute things. Be creative! (2 marks)