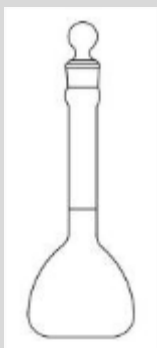**Dilution Worksheet:**

1. How would you prepare 25.00 mL of 0.1210 M CH_3COOH solution from a 0. 3003 M CH_3COOH solution? Calculate and fill in the plan of action.

Plan of action (watch significant figures):

I would pipet _____ mL of CH_3COOH from the
(volume in mL)

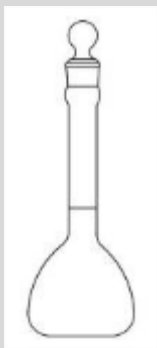_____ M CH_3COOH solution into a volumetric flask.
   (concentration)

Then I would add water to make the volume up to the mark in the volumetric

flask to obtain a total volume of _____ L of a
(volume in L)

_____ M CH_3COOH solution.
   (concentration)

2. How would you prepare 10.00 mL of 0.6520 M HCl solution from a 1.255 M HCl solution? Calculate and fill in the plan of action.

Plan of action (watch significant figures):

I would pipet _____ mL of HCl from the
(volume in mL)

_____ M HCl solution into a volumetric flask.
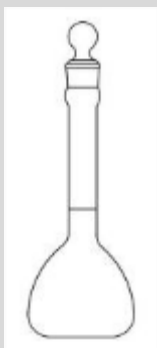(concentration)

Then I would add water to make the volume up to the mark in the volumetric

flask to obtain a total volume of _____ L of a
(volume in L)

_____ M HCl solution.
(concentration)

3. How would you prepare 5.00 mL of 0.01100 M NaOH solution from a 0.9885 M NaOH solution? Calculate and fill in the plan of action.

Plan of action (watch significant figures):

I would pipet ____0.0556____ mL of NaOH from the
 (volume in mL)

____0.9885____ M NaOH solution into a volumetric flask.
 (concentration)

Then I would add water to make the volume up to the mark in the volumetric

flask to obtain a total volume of ____0.00500____ L of a
 (volume in L)

____0.01100____ M NaOH solution.
 (concentration)