

## Chem collective Vlabs screening task assignment

### **Using the chemicals in the Stockroom Explorer,**

- i. Dilute 1 M sulphuric acid to 0.01 M.
- ii. Measure pH for 1 M and 0.01 M sulphuric acid

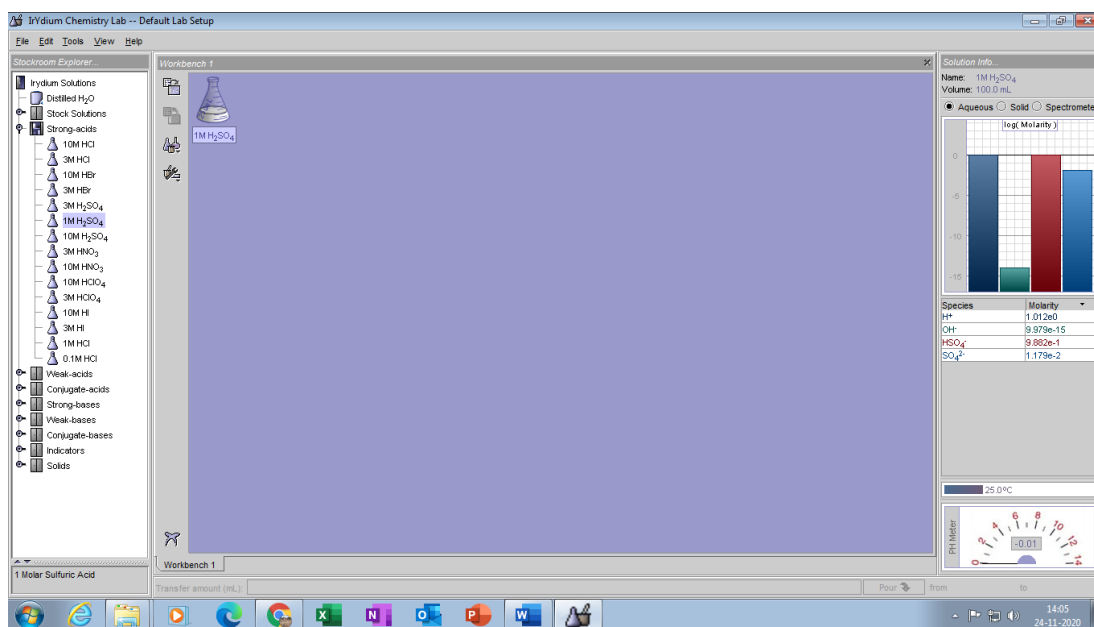
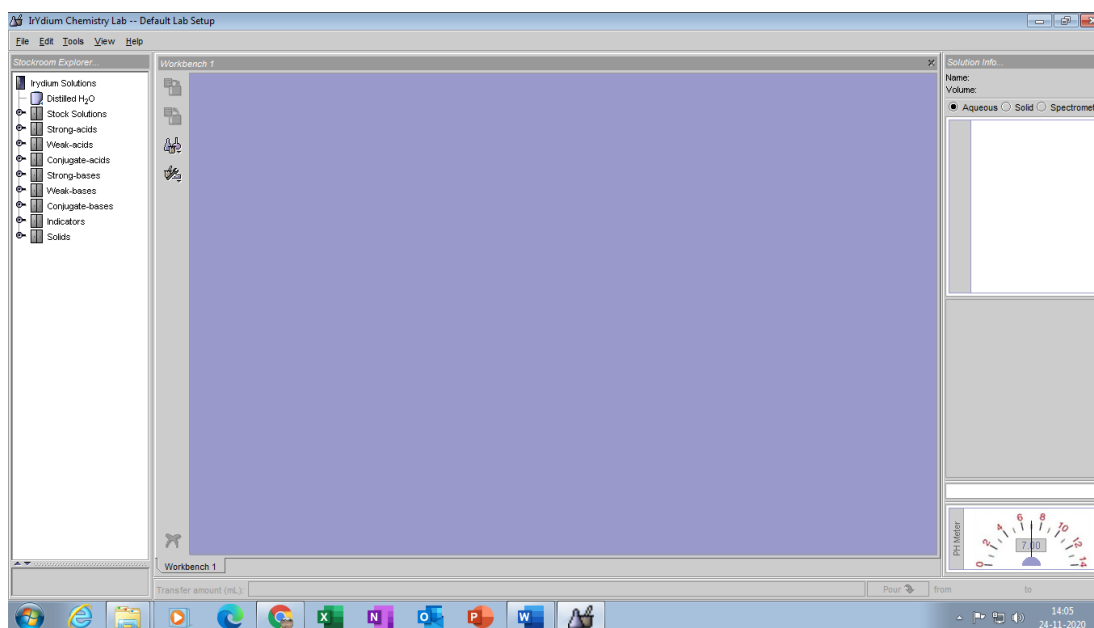
#### Step 1:

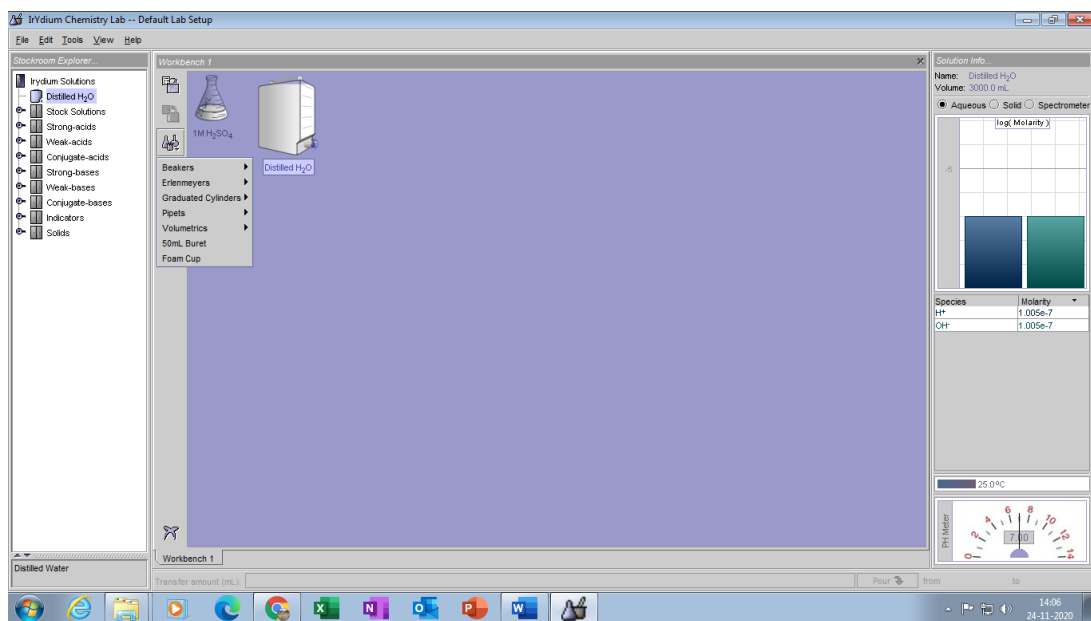
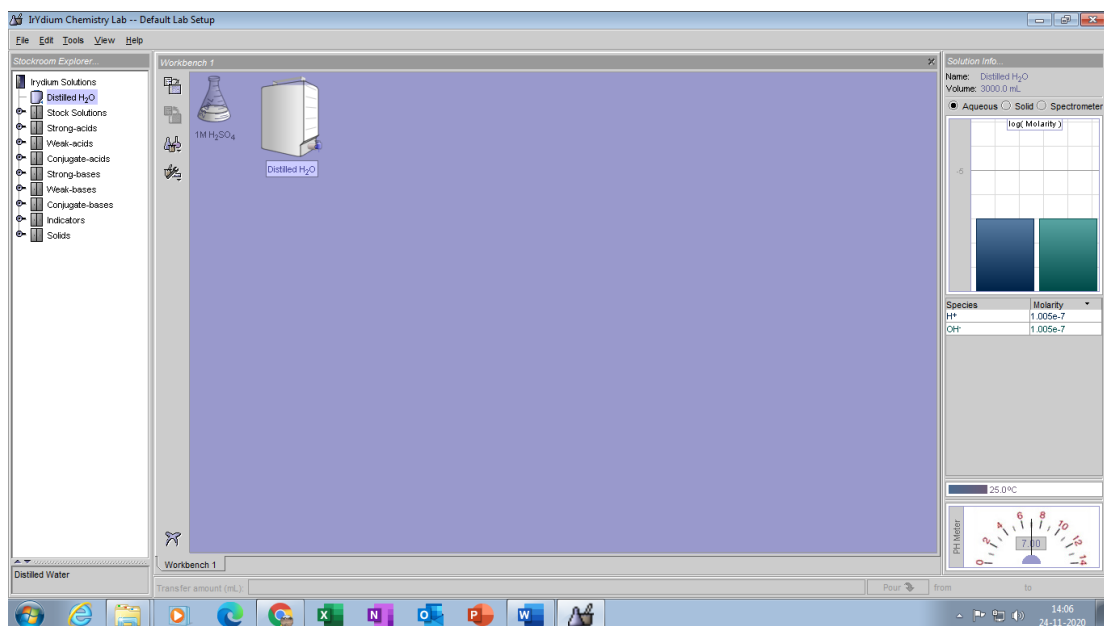
- $V_1 * N_1 = V_2 * N_2$
- $100 * 0.01 = x * 1$
- $x = 100 * 0.01 / 1$
- $x = 1 \text{ ml}$
- 1ml taken from 1M sulphuric acid to make into 0.01 M sulphuric acid

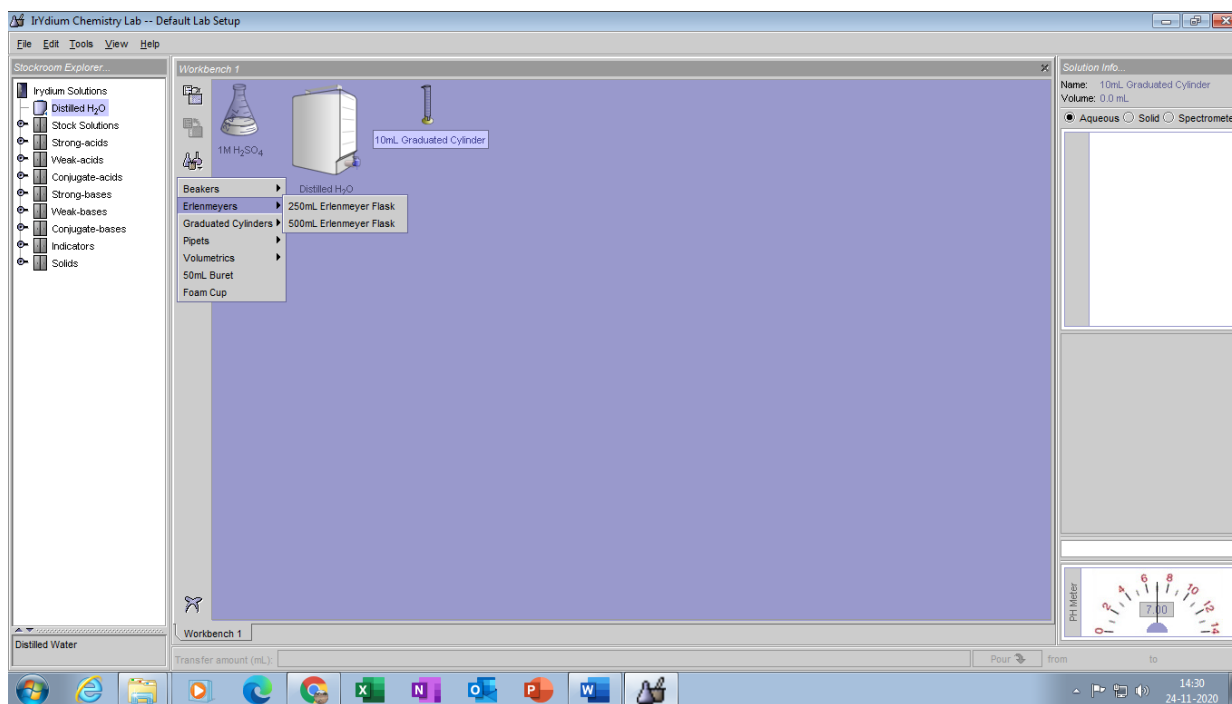
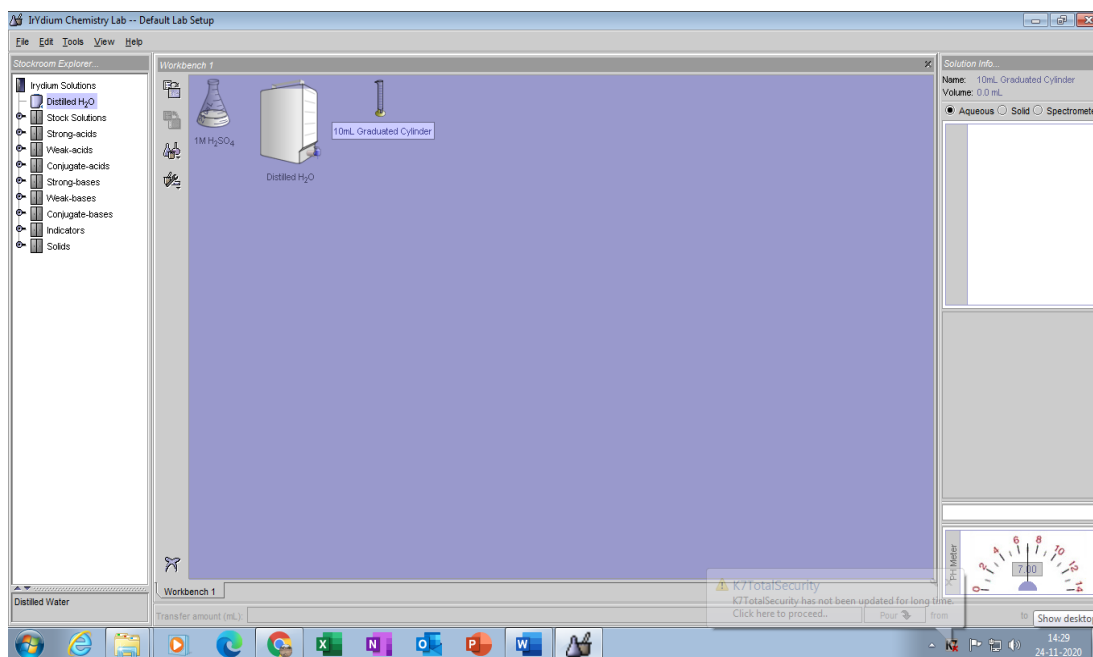
#### step 2:

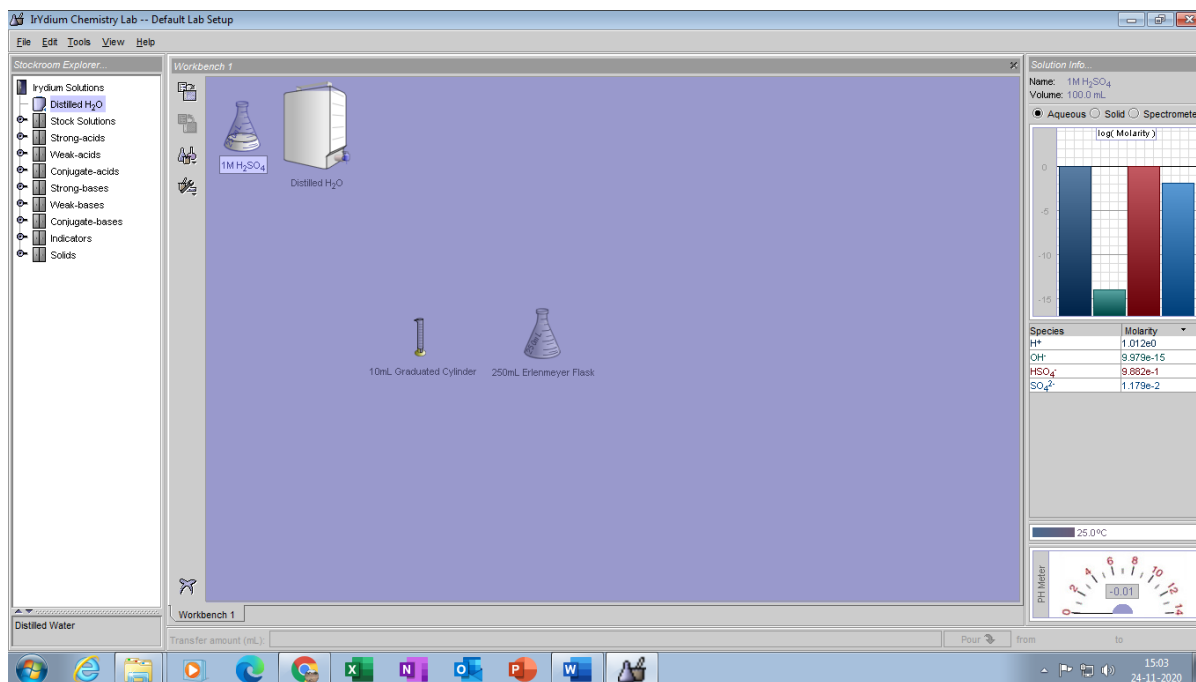
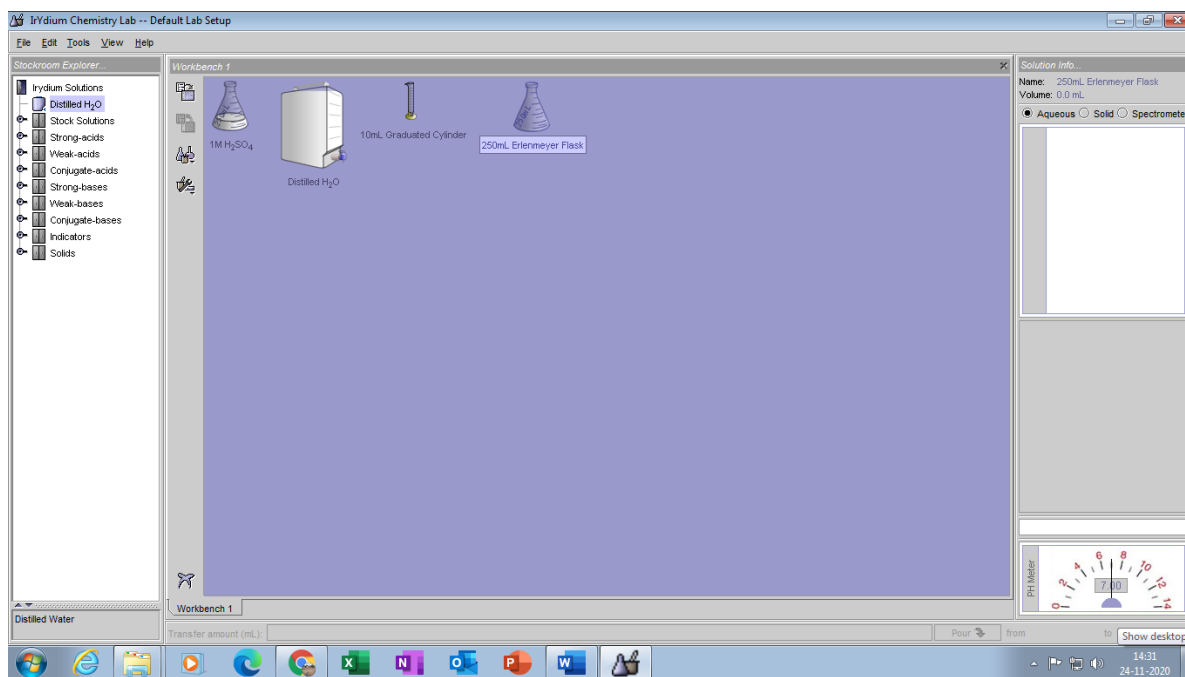
- Open virtual chemistry application window
- Stockroom explorer opens with various solutions of acids and bases
- Double click on strong acids cabinet, a list of acidic solutions with various strengths are displayed
- Double click to choose 1M $\text{H}_2\text{SO}_4$  solution.
- Click on the flask and note the pH on the pH meter in the right bottom corner.
- pH meter reads \_\_\_\_-0.01\_\_
- Click on the radio button near strong acid cabinet to close the list
- Double click on the distilled water icon from stock room explorer
- Add the apparatus from the glassware icon-select-graduated cylinders-select 10ml graduated cylinder from the submenu to add to workbench.
- Now again select the glassware icon and click Erlenmeyer flask-select 250 ml Erlenmeyer flask to the workbench
- Drag 1M  $\text{H}_2\text{SO}_4$  solution flask over to the graduated cylinder and adjust to see the green +on the flask.
- Type 1 ml in the transfer amount (ml) input bar- click on pour
- From tool menu-select-transfer-realistic transfer mode-click pour button gradually
- Move the flask aside
- Move the distilled water tank over the flask-Type 99 ml in the transfer amount (ml) input bar- click on pour
- Move the distilled water aside

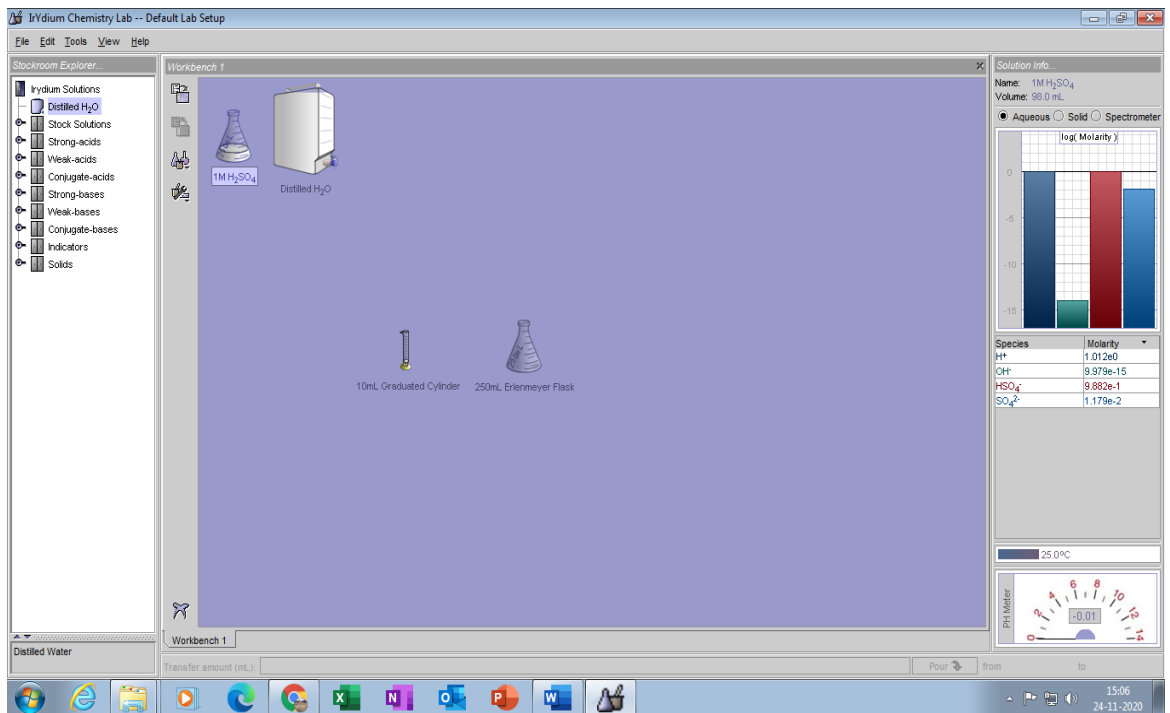
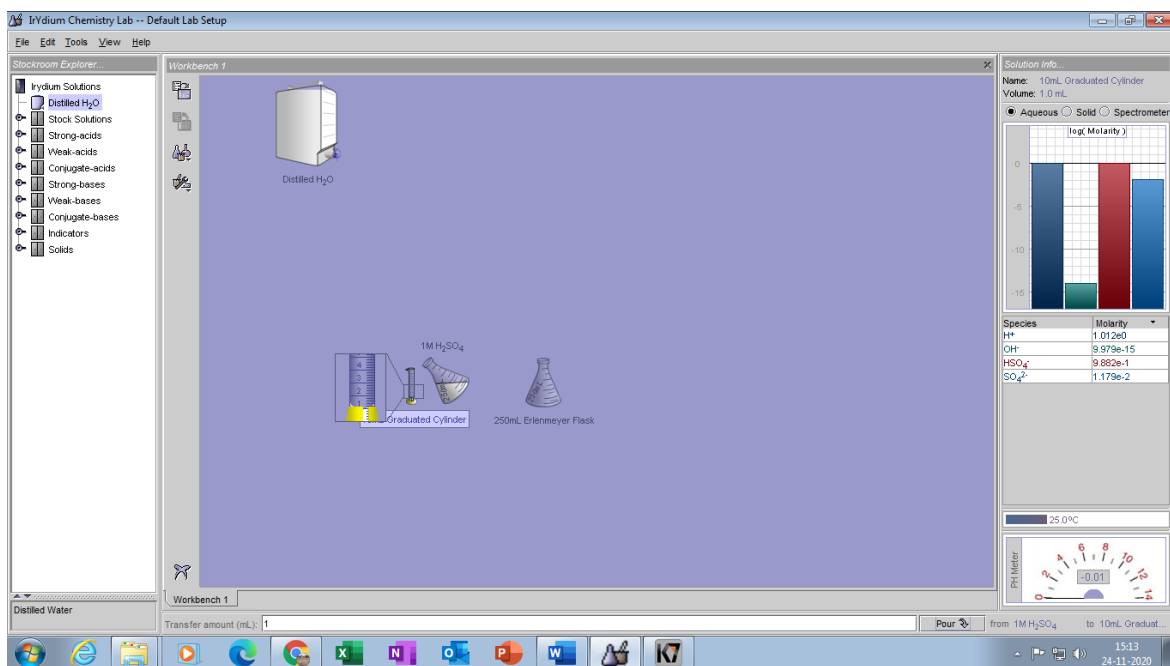
- Place the graduated cylinder over flask and see green +
- From tool menu-select-transfer-realistic transfer mode-click pour button gradually
- Move the graduated cylinder aside
- Now click on flask and observe the pH on the pH meter
- pH meter reads 1.84

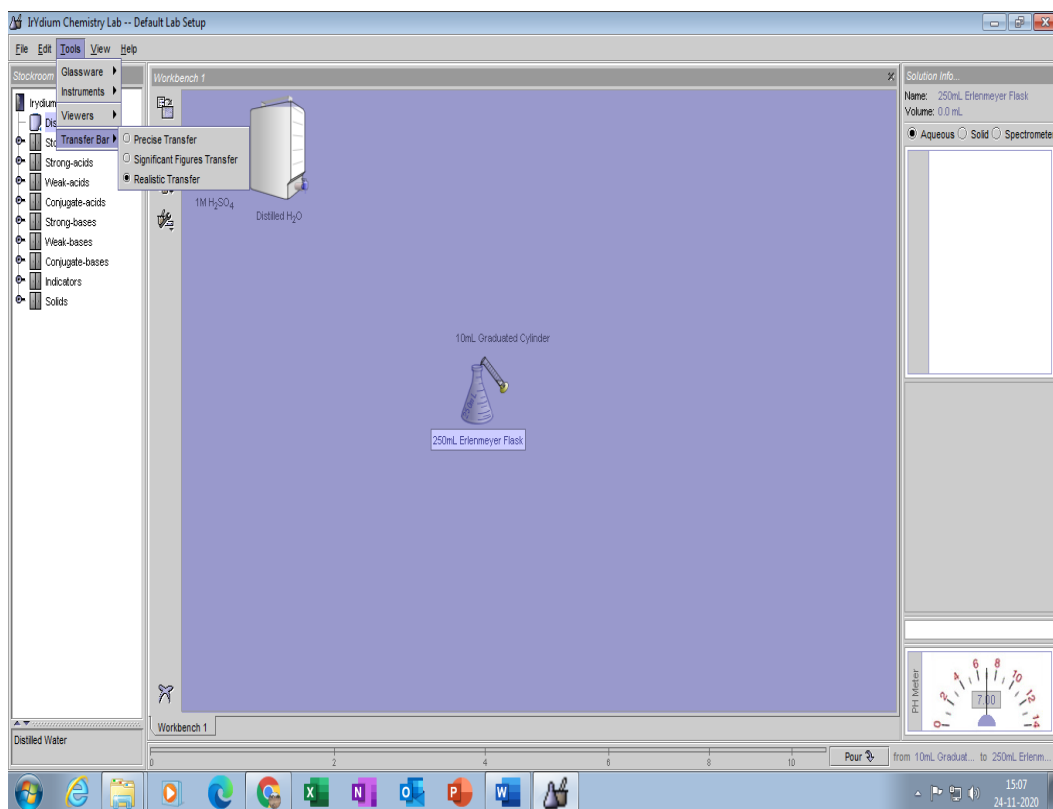
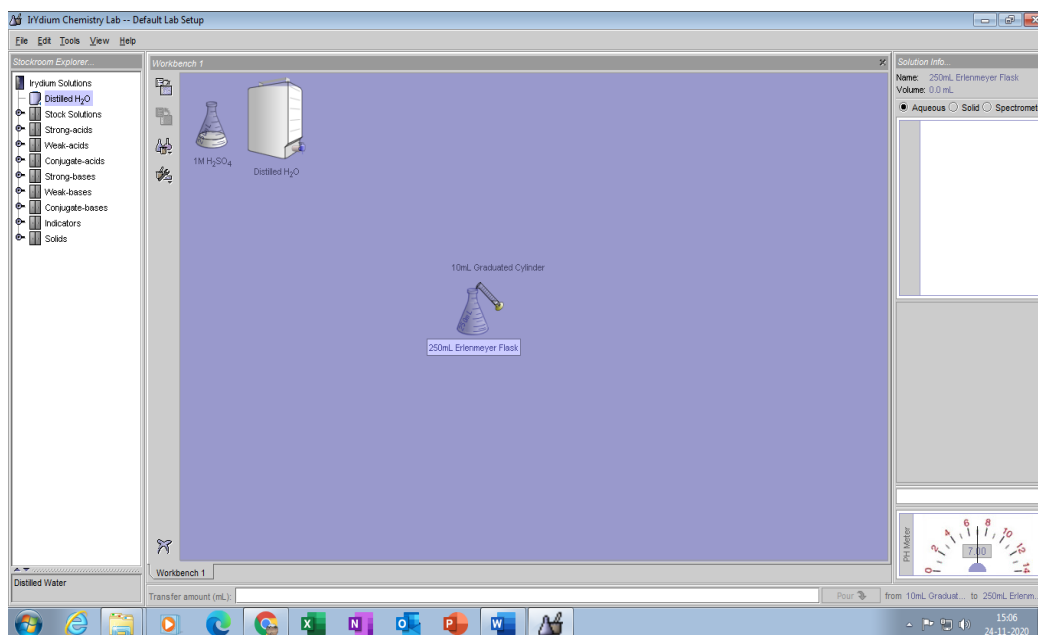


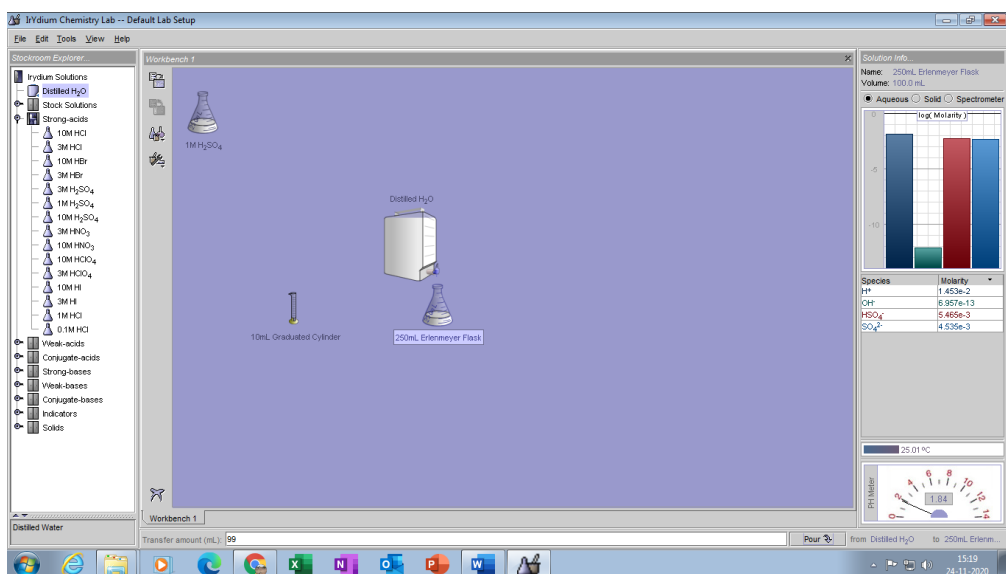
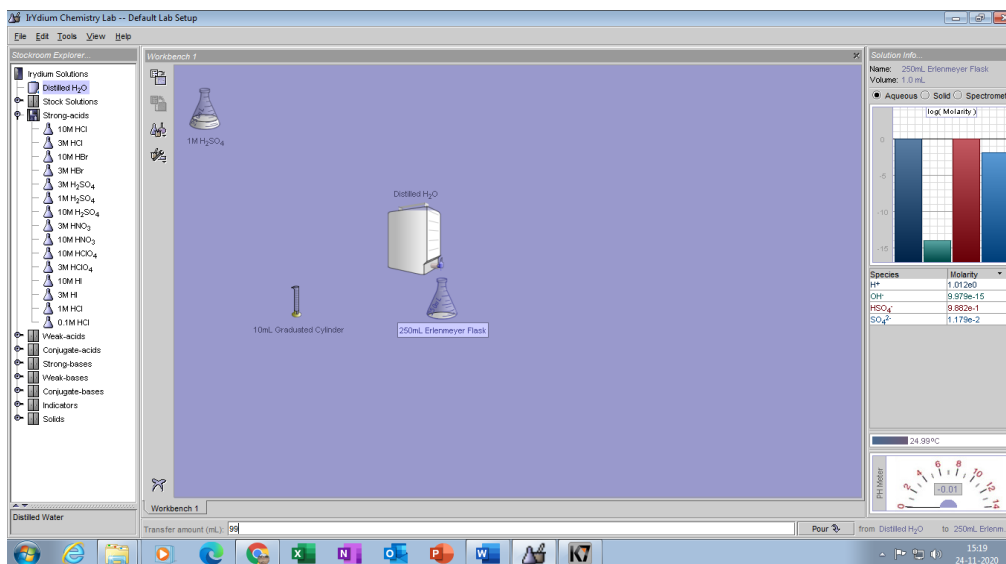
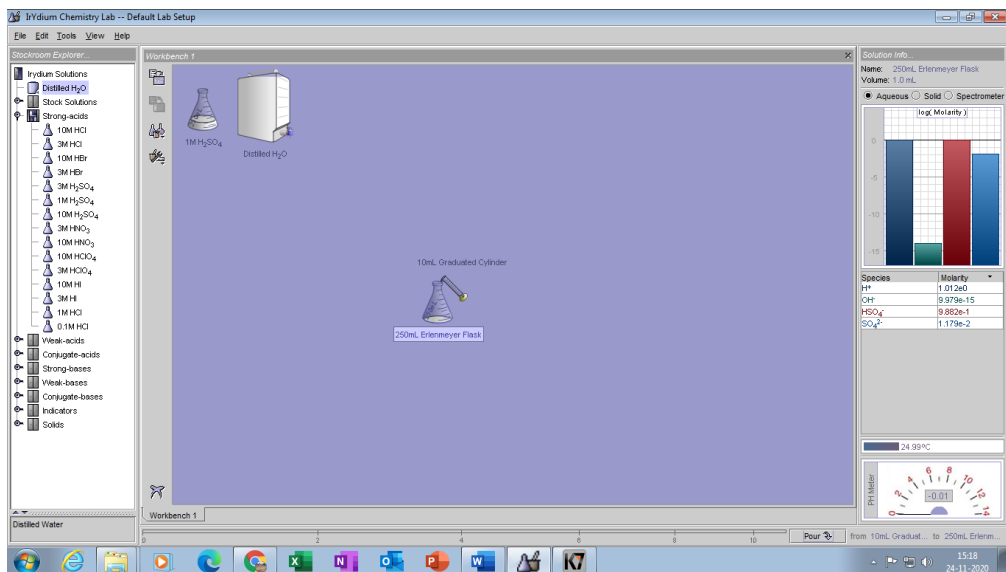




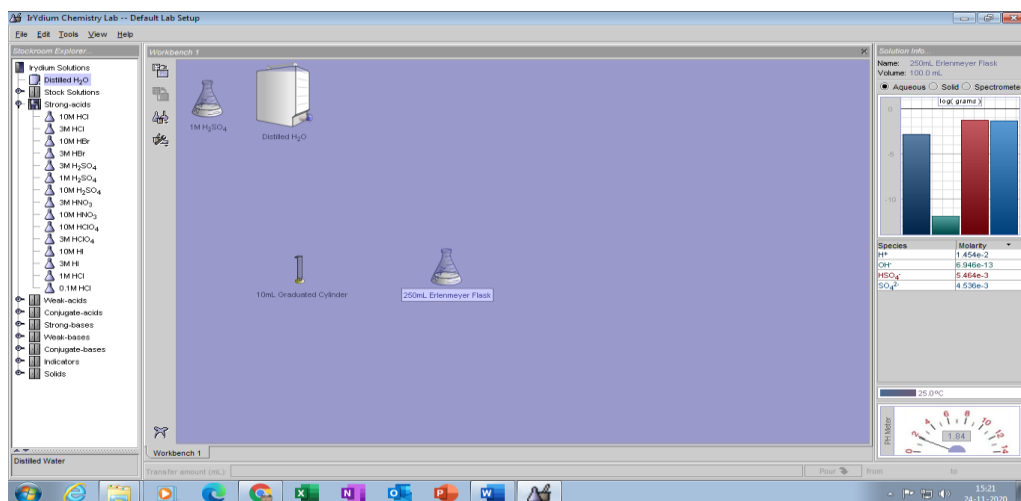












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