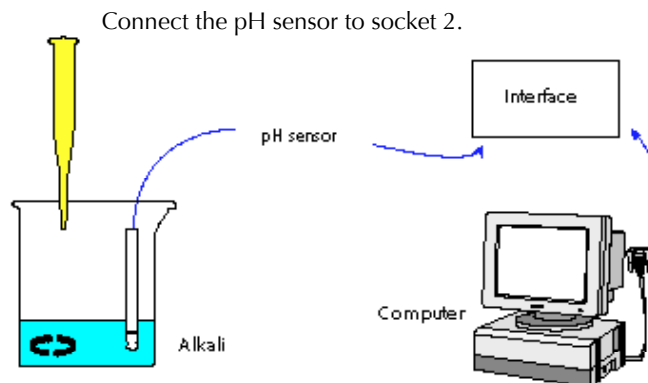


# Acid-base titration

An example using icon driven software

As acid drains into alkali the pH changes and this can be monitored using a pH sensor. Your data logging software will need to have a feature where the volume of acid added can be typed in as you do so. When you want to do something a little bit out of the ordinary, icon driven software such as SoftLab, Robolab, PASCO's Data Studio are particularly flexible and allow you to do this in an intuitive way.



## Apparatus

Burette, stand, stirrer, pH Indicator solution, pH electrode, pH buffer solution, 200 cm<sup>3</sup> 0.1 M sodium hydroxide, 50 cm<sup>3</sup> 0.5M hydrochloric acid, 200 cm<sup>3</sup> beakers, interface, pH sensor.

Continue like this till the titration is complete.

## Using the program

Drop a Sensor on the Benchtop

Choose Keyboard Entry. Click on  .

Drop a Sensor on the Benchtop

Choose pH sensor. Click on  .

Drop a Graph on the Benchtop

Wire the boxes together as shown.

Double click the Graph to open a window.

Re-position the window.

Choose Run, Check & Start

Enter the volume of acid added:

i.e. type 0

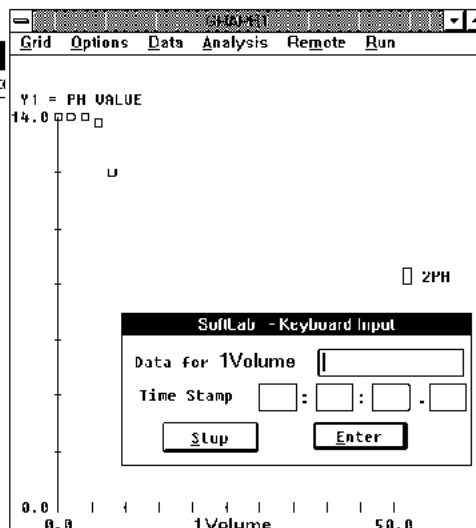
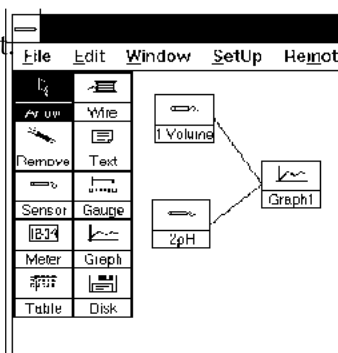
Add 2cm<sup>3</sup> acid, let the pH stabilise then,

Enter the volume of acid added:

i.e. type 2

## Results

From the graph window choose Analysis, Coords and move the pointer over the graph to take readings.



Section

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Experiments

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