## **Chemistry Notes 2013 – Titration Practical Test**

## General

- Titration is a form of volumetric analysis it's used to determine the concentration of an unknown solution by reacting it with another solution of known concentration.
  - o 1 solution's concentration is known
  - o Measure the volumes of both exactly, then determine by means of calculations
- Indicator to be used: Methyl orange

Acid: OrangeAlkali: Yellow

- Note: A fixed quantity of the unknown solution, is titrated with the standard solution, and the volume of standard solution used is measured.

## **Technique**

- Wash <u>all</u> apparatus thoroughly with tap water, and then rinse with distilled water.
- Wash burette and pipette with respective solutions (conical flask with distilled water only).
- Read all readings from lower meniscus.
- Add 3 drops of methyl orange.
- End point for methyl orange is: (ta-da) orange.
- Prepare both conical flasks before titrating to compare colour

## **Recording and Answering**

- Burette: 2dp, Pipette: 1dp
- Tick at least 2 titration readings (ensure they do not differ by more than 0.1cm<sup>3</sup>)
- All calculations to 3sf.

Titration Number	1	2
Final Reading / cm <sup>3</sup>		
Initial Reading / cm <sup>3</sup>		
Volume of P used / cm <sup>3</sup>		
Best titration results (V)		

Volume of Q used =	
Average volume of P used =	(take average based on ticked best titration results)