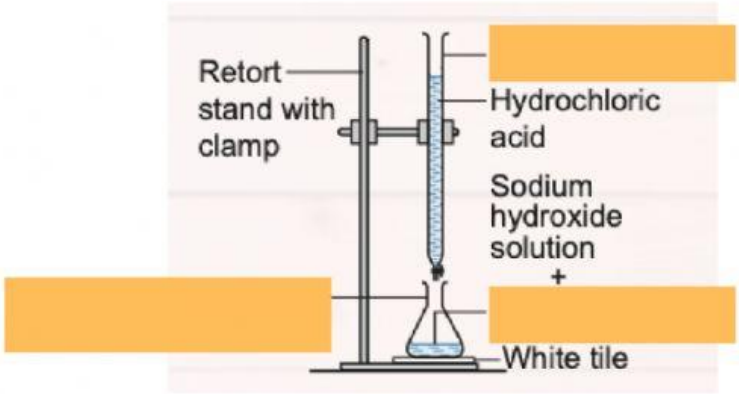
Practical: Acid and Alkali

Aim: To study the neutralisation reaction between hydrochloric acid and sodium hydroxide solution.

Materials: Phenolphthalein, 0.5 M hydrochloric acid and 0.5 M sodium hydroxide solution

Apparatus: Burette, pipette, conical flask, retort stand with clamp, white tile and filter funnel



Procedure:

1. Fill 30 ml of hydrochloric acid into a burette using a _____ and record the initial reading of the burette.
2. Transfer 25 ml of sodium hydroxide solution into a conical flask using a _____
3. Add three drops of _____ into the conical flask. Set up the apparatus as shown in the figure.
4. Add the hydrochloric acid from the burette drop by drop into the _____ while shaking the flask gently.
5. Stop adding the acid when the sodium hydroxide solution changes colour from pink to _____
6. Record the final reading of the burette.

Observation:

Initial reading of the burette (ml)	
Final reading of the burette (ml)	
Volume of hydrochloric acid used (ml)	

LIVEWORKSHEETS



Let's do this!



1. Name the reaction.
2. Name the method used.
3. Another indicator can be used is *hint: start with M
4. Can we replace hydrochloric acid with sulphuric acid? (answer Yes or No)
5. Can we replace the sodium hydroxide solution with solid sodium hydroxide? (answer Yes or No)
6. The general equation of the above reaction would be

[ ] + [Alkali] → [ ] + [Water]

7. The word equation of the above reaction would be

[Hydrochloric acid] + [sodium hydroxide] → [ ] + [ ]

8. We know the volume of acid needed to neutralise the alkali in the experiment by subtracting the volume of the burette with its volume. (Choice of answer: initial, final)

LIVEWORKSHEETS