

AQA Chemistry A-Level

RP9 - Investigating pH changes

Flashcards

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What is an acid?



What is an acid?

A proton donor.



What is a base?



What is a base?

A proton acceptor.



What is an alkali?



What is an alkali?

A base that dissolves in water.



Why are acid-base indicators used?



Why are acid-base indicators used?

To detect when a reaction reaches completion/becomes neutral, usually by the presence of a colour change.



Why does a pH meter need to be calibrated?



Why does a pH probe need to be calibrated?

So that the pH values for each pH reading are accurate.



What is accuracy?



What is accuracy?

The more accurate the data, the closer it is to the actual value.



How can you investigate how a weak acid's pH changes upon addition of strong base?



How can you investigate how a weak acid's pH changes upon addition of strong base?

Add 2 cm^3 of NaOH from a burette to ethanoic acid, in a conical flask.

Continue adding 2 cm^3 of NaOH, measuring the pH each time.



Why is it important to stir the resulting solution?



Why is it important to stir the resulting solution?

So all acid and base is thoroughly mixed, so the pH doesn't significantly vary throughout the solution as this would give an inaccurate reading.



How would you analyse this data?



How would you analyse this data?

- Plot a graph of measured pH values (y-axis) against volume of NaOH solution added (x-axis).
- What is the shape of the curve?

