



SC8 Acids and alkalis

Personal learning checklist | 1 of 1

GCSE Edexcel Separate Sciences | Chemistry Paper 1

Name _____ Class _____ Date _____

Tick one box for each statement. Red: need help. Amber: partly confident.
Green: can do independently.

I can	Red	Amber	Green
Acids and pH			
Distinguish acids, bases and alkalis using hydrogen ions, hydroxide ions and solubility.	☐	☐	☐
Interpret pH values and describe litmus, methyl orange, phenolphthalein and universal indicator colours.	☐	☐	☐
Relate pH to hydrogen-ion concentration and calculate concentration factors from pH differences (Higher).	☐	☐	☐
Distinguish strong and weak acids from concentrated and dilute solutions, including dilution effects (Higher).	☐	☐	☐
Reactions and salts			
Predict products and write equations for acid reactions with metals, oxides, hydroxides and carbonates.	☐	☐	☐
Name salts formed by hydrochloric, sulfuric and nitric acids and test for hydrogen and carbon dioxide.	☐	☐	☐
Explain neutralisation and use the hydrogen-ion and hydroxide-ion equation, identifying spectator ions.	☐	☐	☐
Preparing salts			
Describe copper sulfate crystal preparation, explaining excess base, filtration, gentle concentration, cooling, washing and drying.	☐	☐	☐
Explain why acid-alkali salt preparation requires titration and a repeat without indicator.	☐	☐	☐
Describe safe titration, calculate titres and use concordant results to determine reacting volumes.	☐	☐	☐
Solubility and investigation			
Apply common salt solubility rules to predict and name precipitates when solutions are mixed.	☐	☐	☐
Describe filtration, washing and drying to prepare a pure insoluble salt.	☐	☐	☐
Plan and interpret the acid-base pH practical, controlling variables and explaining the rising pH.	☐	☐	☐

My next revision priority _____