

# The Periodic Table: Qualitative Analysis

The key areas of study in this topic are:

- Test tube reactions to identify ions in an unknown compounds

By the end of this topic I should be able to:	Start	End
Describe and use tests for the following anions: <ul style="list-style-type: none"> <li>• <math>\text{CO}_3^{2-}</math> (by reaction with <math>\text{H}^+</math>(aq) forming <math>\text{CO}_2(\text{g})</math>)</li> <li>• <math>\text{SO}_4^{2-}</math>, by precipitation with <math>\text{Ba}^{2+}</math>(aq)</li> <li>• <math>\text{Cl}^-</math>, <math>\text{Br}^-</math>, <math>\text{I}^-</math> (by reaction with <math>\text{Ag}^+</math>(aq), followed by <math>\text{NH}_3(\text{aq})</math>)</li> </ul>		
Understand the correct sequence of anion tests required in order to avoid false positive results		
Describe and use tests for the following cations: <ul style="list-style-type: none"> <li>• <math>\text{NH}_4^+</math> (by reaction with warm <math>\text{NaOH}(\text{aq})</math> forming <math>\text{NH}_3</math>)</li> </ul>		

In all topic areas you should be able to demonstrate and apply your knowledge and understanding.

