

CHEMISTRY AS 90934 v2
Demonstrate understanding of aspects of chemical reactions
Level 1, 4 Credits

This achievement standard involves demonstrating understanding of aspects of chemical reactions.

Chemical reactions will be selected from the following types of reactions:

- ☐ Combination reactions
 - elements with other elements

- ☐ Exchange/precipitation reactions, limited to the formation of
 - chlorides and iodides of silver and lead
 - sulfates of calcium, barium and lead
 - hydroxides of copper, iron(II), calcium, barium and magnesium
 - carbonates of copper, iron(II), calcium, barium, magnesium, zinc, and lead ions.

- ☐ Decomposition reactions, limited to thermal decomposition of
 - hydroxides (hydroxide \rightarrow oxide + water)
 - carbonates (carbonate \rightarrow oxide + carbon dioxide)
 - hydrogen carbonates (hydrogen carbonate \rightarrow carbonate + water + carbon dioxide)
 - catalytic decomposition of hydrogen peroxide (hydrogen peroxide \rightarrow oxygen + water)

- ☐ Displacement reactions, limited to the displacement of metal ions in solution by other metals.

- ☐ Vocabulary and conventions
 - chemistry vocabulary
 - describing chemical reactions
 - classifying reactions
 - symbols and conventions
 - names
 - formulae
 - writing word equations
 - completing given symbol equations
 - writing balanced symbol equations
 - where applicable, chemical reactions can be explained using the concept of electron transfer

Resources supplied

A resource booklet will be provided. It will contain:

- a metal activity series
- solubility rules
- a table of ions
- a Periodic Table that shows the symbol, atomic number and the relative atomic mass (to three significant figures) of each element.