

## Unit 14: Simple Chemical Reactions

### Student Outcome Statements

In this Unit students

- 14.1 are introduced to the idea that chemical change results in new substances that are different from the ones from which they were made
- 14.2 explore some simple chemical reactions of acids in which a gas is formed
- 14.3 explore burning as a chemical reaction involving a gas (air or oxygen)
- 14.4 identify hydrogen and oxygen as elements which take part in chemical reactions
- 14.5 work with gases to understand that gases are real materials
- 14.6 begin to use word equations as shorthand descriptions of reactions

### Level 1

- 14.1.1 be able to distinguish between physical and chemical change
- 14.1.2 name some common substance produced by chemical reactions
- 14.1.3 state that oxygen (or air) is involved in burning and rusting

### Level 2

- 14.2.1 describe the properties of Oxygen and Hydrogen
- 14.2.2 describe tests for Oxygen and Hydrogen
- 14.2.3 state that hydrogen is formed when acids react with metals
- 14.2.4 state that oxides are formed when materials burn and rust

### Level 3

- 14.3.1 state ways of preventing rusting
- 14.3.2 use word equations to represent the above reactions
- 14.3.3 explain ways of preventing a fire using the fire triangle