

## Higher education / apprenticeship

### Earth Resources

How can we live sustainably?

### Chemistry of the atmosphere

How are humans damaging the air?

### Chemical analysis

How do scientists gather information?

### Crude oil

How do we use the Earth's resources?

### Energy changes

Why does the temperature increase in some reactions but decrease in others?

### Rates of reaction

Why do some reactions happen faster than others?

### Chemical Calculations

What is the percentage of oxygen in magnesium oxide?

### Electrolysis

How can we extract reactive metals from their ores?

### Structure and Bonding

How and why do molecules react when mixed?

### Chemical changes

What many ways can we produce salts?

### Atomic Structure

What is everything made of? What do they look like?

### Periodic Table and states of matter

How are materials different?

### Gateway 1: Detection & analysis

How do scientists detect, analyse and predict?

### Gateway 2: Chemistry in Action (Y band)

What is the scientific reason for everyday reactions and phenomena?

Year 11

Year 10

Year 9

