Open Awards Qualification Unit



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1 Unit Details

| Unit Title: | Chemical Reactions |
|---------------------------|--------------------|
| Unit Reference Number: | J/618/3222 |
| Level: | 2 |
| Credit Value: | 3 |
| Minimum GLH: | 24 |

2 Learning Outcomes and Criteria

| Learning Outcome (The Learner will): | Assessment Criterion (The Learner can): | |
|--------------------------------------|--|--|
| 1. Be able to identify common gases | 1.1 Outline how to identify common gases including CO2. Describe how we test for common gases including CO2, H2 and O2 | |
| | 1.2 Demonstrate the identification of common gases | |
| | 1.3 Give the state symbols for; | |
| | a) Solids | |
| | b) Liquids | |
| | c) Gases | |
| | d) Aqueous solutions | |
| 2. Know about chemical reactions | 2.1 Describe energy changes in chemical reactions including: | |
| | a) Bond making | |
| | b) Bond breaking | |
| | c) Use this idea of energy to explain endothermic and exothermic reactions. | |
| | d) Describe bonds in terms of intermolecular and electrostatic forces | |

| | | 2.2 | Know what reversible reaction is and the factors that affect this |
|----|--|-----|--|
| | | 2.3 | Outline factors that will affect rate of reaction, including: |
| | | | a) Temperature |
| | | | b) Concentration |
| | | | c) Surface area |
| | | | d) Catalyst |
| | | 2.4 | Define the characteristics of the following types of reaction: a) Redox b) Acid-base c) Combustion d) Precipitation |
| | Be able to use formulae to represent molecules and equations to represent chemical reactions | 3.1 | Construct simple formulae for molecules |
| | | 3.2 | Construct a balanced equation for types of chemical reaction |
| 4. | Describe the relationship between reactants and products | 4.1 | Explain the effect of a limiting a reactant on the amount of products |
| | | 4.2 | Use the relative formula mass to calculate the number of moles in a given mass |
| | | 4.3 | Calculate the masses of reactants and products from the balanced symbol equation and the mass of a given reactant or product |