Curriculum Audit

The Art of Chemistry



VCE Units 1-4

| Learning Area | Unit | Area of Study | Topic | Key Knowledge |
|---------------|------|---------------|--|---|
| Chemistry | 2 | 1 | Acid-base (proton-transfer) reactions | CHEM.U2 AOS1.2.1 · The Brønsted-Lowry theory of acids and bases, including polyprotic acids and amphiprotic species, and the writing of balanced ionic and full equations, with states, for their reactions in water |
| Chemistry | 2 | 2 | Measuring solubility and concentration | CHEM.U2 AOS2.1.1 Solution concentration as a measure of the quantity of solute dissolved in a given mass or volume of solution (mol L-1, g L-1, %(m/v), %(v/v), ppm), including unit conversions |
| Chemistry | 2 | 2 | Analysis for acids and bases | CHEM.U2 AOS2.2.1 Volume-volume stoichiometry (solutions only) and application of volumetric analysis, including the use of indicators, calculations related to the preparation of standard solutions, dilution of solutions, and use of acid-base titrations (excluding back titrations) to determine the concentration of an acid or a base in a water sample |
| Chemistry | 2 | 2 | Analysis for salts | CHEM.U2 AOS2.4.2 Quantitative analysis of salts: - molar ratio of water of hydration for an ionic compound - the application of mass-mass stoichiometry to determine the mass present of an ionic compound - the application of colorimetry and/or UV-visible spectroscopy, including the use of a calibration curve to determine the concentration of ions or complexes in a water or soil sample |

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