**Chapter 4 – Relative Atomic Mass and the Mole**

**Key Knowledge**

* Calculation of relative atomic mass
* The mole concept
* Empirical formulas and molecular formulas
* Percentage composition
* Avogadro’s constant
* Interpretation of data from mass spectrometry

**Chapter Outcomes**

* Use data from mass spectrometry and apply it in the determination of relative atomic mass.
* Use relative atomic masses to calculate relative molecular and relative formula masses.
* Understand that a mole is an amount of substance that contains a particular number of specified particles.
* Use Avogadro’s number to calculate the number of specified particles in a given amount of an element or compound.
* Calculate the number of atoms, molecules or ions in a given amount of substance.
* Use the molar mass of an element or a compound appropriately in calculations.
* Calculate the empirical formula of a compound
* Calculate the molecular formula of a compound.