

## Access to Higher Education Unit

This unit forms part of an Access to HE Diploma. If delivering the graded version of this unit, please refer to the Provider Handbook for details on grading descriptors and the application of these across units within your programme.

**Unit Title:** Structure and Bonding

**Graded Unit Reference Number:** GA33CHE09

**Ungraded Unit Reference Number:** UA33CHE09

**Module:** Chemistry

**Level:** Three (3)

**Credit Value:** Three (3)

**Minimum Guided Learning Hours:** 30

Learning Outcome (The Learner will):	Assessment Criterion (The Learner can):
1. Understand atomic structure	1.1 Describe the properties of electrons, protons and neutrons using relative charge and mass
	1.2 Describe the structure of atoms in terms of atomic particles
	1.3 Define atomic number and mass number
	1.4 Explain isotopes and hence relative atomic mass
	1.5 Calculate relative atomic masses from isotopic abundance data
2. Understand covalent bonding and the structure of molecules	2.1 Describe covalent bonding
	2.2 Write the formulae of simple covalent compounds
	2.3 Investigate properties of covalent compounds, including melting and boiling points and solubility
	2.4 Explain bond polarity in terms of electronegativity
3. Understand ionic bonding and some properties of ionic compounds	3.1 Describe the ionic bond

3.2 Write the formulae of simple ionic compound

3.3 Investigate the properties of typical ionic compounds