

## 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:** Periodicity

**Graded Unit Reference Number:** GA33CHE14

**Ungraded Unit Reference Number:** UA33CHE14

**Module:** Chemistry

**Level:** Three (3)

**Credit Value:** Three (3)

**Minimum Guided Learning Hours:** 30

**Units barred for selection against this unit:**

- Characteristics of the Periodic Table (GA36CHE18 / UA36CHE18)

Learning Outcome (The Learner will):	Assessment Criterion (The Learner can):
1. Understand the arrangement of elements in the periodic table	1.1 Describe how elements are arranged within the periodic table
	1.2 Explain the electron configuration of elements in relation to their position in the periodic table
2. Know the trends in physical and chemical properties of the elements in period 3 of the periodic table	2.1 Describe the trends in atomic radius, first ionisation energy and melting points of the period 3 elements
	2.2 Explain the trends in atomic radius and first ionisation energy of the period 3 elements
	2.3 Explain the trend in melting point of the period 3 elements
	2.4 Write equations for the reactions of the oxides of period 3 elements with water, a strong acid and/or a strong base, where appropriate
	2.5 Describe the trend in acid-base behaviour of the period 3 oxides

2. Know the trends and patterns of the elements in group 1 and group 7 (17) of the periodic table	3.1 Describe and explain the variation of atomic radius, first ionisation energy and electronegativity of group 1 elements
	3.2 Describe the reactions of group 1 elements with water and use these reactions to explain the trend in reactivity of group 1 elements
	3.3 Describe and explain the variation of atomic radius, first ionisation energy, electronegativity and melting point of group 7 (17) elements
	3.4 Perform displacement experiments between group 7 (17) elements with halide salt solutions
	3.5 Describe and explain the variation in oxidising powers of group 7 (17) elements