Time Allocation
This unit of work will consist of approximately 100 hours of which at least 50 hours will be class time. To complete this unit of work satisfactorily, students must complete each of the following learning outcomes.

Learning Outcomes

**Outcome 1** On completion of this unit the student should be able to relate the position of elements in the periodic table to their properties, investigate the structures and properties of metals and ionic compounds, and calculate mole quantities.

**Outcome 2** On completion of this unit the student should be able to investigate and explain the properties of carbon lattices and molecular substances with reference to their structures and bonding, use systematic nomenclature to name organic compounds, and explain how polymers can be designed for a purpose.

**Outcome 3** On completion of this unit the student should be able to investigate a question related to the development, use and/or modification of a selected material or chemical and communicate a substantiated response to the question.

Assessment Tasks

1. **Practical investigation** on the chemical reactivity of metals requiring a written report.
   *Weighting:* This task is worth 15% of the overall grade.
   *Due:* Term 2 Week 1

2. **Topic Tests** on atomic structure, the periodic, the mole concept and chemical bonding.
   *Weighting:* The combined total of the two task is worth 30% of the overall grade.
   *Due:* Term 1 Week 6 and Term 2 Week 6

4. **Research Investigation** (Outcome 3)
   Students will be required to investigate one aspect of the discoveries and research that have underpinned the development, use and modification of useful materials or chemicals.
   *Weighting:* This task is worth 15% of the overall grade.
   *Time allocated to task: 4 periods*  
   *Due:* Term 2 Week 7

5. **Semester Examination**
   *Weighting:* This task is worth 40% of the overall grade.
   *Due:* Term 2 Week 8

*Dates are an approximation and may very slightly.*