

## National 5 Chemistry – Success Criteria

All learners in Chemistry will be expected to develop their skills in class and at home as described below and will be regularly assessed both informally and formally to inform the estimate for SQA.

### **Skills, knowledge and understanding:**

Learners in Chemistry will show development by:

- ✓ demonstrating knowledge and understanding of chemistry by making accurate statements in the following contexts:
- ✓ Chemical Changes and Structure:
  - ◆ Rates of reaction
  - ◆ Atomic structure and the periodic table
  - ◆ Bonding
  - ◆ Formulae and reacting quantities
  - ◆ Acids and Bases
- ✓ Nature's Chemistry:
  - ◆ Energy from Fuels
  - ◆ Homologous series
  - ◆ Everyday Consumer Products
- ✓ Chemistry in Society:
  - ◆ Metals
  - ◆ Plastics
  - ◆ Fertilisers
  - ◆ Nuclear
  - ◆ Chemical Analysis
- ✓ applying knowledge of chemistry to new situations, interpreting information and solving problems
- ✓ planning experiments to test given hypotheses or to illustrate particular effects
- ✓ carrying out experimental procedures safely
- ✓ demonstrating the ability to select, present and process information (using calculations and units)
- ✓ making predictions and generalisations based on evidence/information
- ✓ drawing valid conclusions and giving explanations supported by evidence/justification
- ✓ evaluating experimental procedures and suggesting improvements to practical investigations
- ✓ communicating findings/information

### **Homework:**

- ✓ I will engage in learning and complete the activities asked of me to the best of my ability.
- ✓ That I meet deadlines for submission of homework.
- ✓ That I respond positively to any feedback on homework and try to improve in this area.

### **Informal Assessments:**

- ✓ Open-ended questions – that I contribute to discussions about the question and that I link different key areas in my written answer.
- ✓ Practical reports – that I follow the candidate guide to complete each assessment standard to a N5 level.
- ✓ Presentations – that I contribute fully to the group task and show improvements throughout the year.
- ✓ Past paper questions – that I complete questions in class correctly and show an improvement in the quality of my answers.

### **Performance in Tracking and Unit Assessments:**

- ✓ Percentage achieved in assessments.
- ✓ Evidence of improvement or working within target level.
- ✓ That I am identifying and resolving areas for development and attending study support if necessary.

### **Formal Assessments:**

- ✓ Percentage achieved in Formal Assessments.
- ✓ That I am aware of my areas of strength and areas for development identified in the Formal Assessments.
  - Knowledge and understanding
  - Scientific inquiry and investigation skills
  - Analytical and problem-solving skills in a Chemistry context
- ✓ That I am working to overcome any identified areas for development by attending study support sessions.

### **What will be taken into consideration when deciding on a teacher-estimated grade for National 5 Chemistry?**

- Performance in the Formal Assessment(s).
- Performance in the tracking and unit assessments.
- Performance in the informal assessments, which are ongoing throughout the year:
  - Open-ended questions.
  - Practical reports.
  - Presentations.
  - Past paper questions.
- Commitment to and quality of homework.