



**Science: Practical Experiments (National 2)** 

**SCQF:** level 2 (6 SCQF credit points)

Unit code: H8M3 72

## **Unit outline**

The general aim of this Unit is to provide opportunities for learners to carry out practical experiments in science-related contexts. Science could include: Biology, Chemistry and Physics.

Learners who complete this Unit will be able to:

- 1 Carry out practical experiments.
- 2 Handle information from practical experiments.

The *Unit Specification* should be read in conjunction with the *Unit Support Notes*, which provide advice and guidance on delivery, assessment approaches and development of skills for learning, skills for life and skills for work. Exemplification of the standards in this Unit is given in *Unit Assessment Support*.

## **Recommended entry**

Entry to this Unit is at the discretion of the centre. However, relevant experiences and outcomes may provide an appropriate basis for doing this Unit.

## **Equality and inclusion**

This *Unit Specification* has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence. For further information, please refer to the *Unit Support Notes*.

### **Standards**

#### **Outcomes and Assessment Standards**

#### Outcome 1

The learner will:

#### 1 Carry out practical experiments by:

- 1.1 Contributing to the planning of given experiments
- 1.2 Participating in carrying out given experiments
- 1.3 Following safe working practices appropriate for given experiments

#### Outcome 2

The learner will:

#### 2 Handle information from practical experiments by:

- 2.1 Recording appropriate information
- 2.2 Presenting information in an appropriate format
- 2.3 Drawing simple conclusions from practical experiments

## **Evidence Requirements for the Unit**

Assessors should use their professional judgement, subject knowledge and experience, and understanding of their learners, to determine the most appropriate ways to generate evidence and the conditions and contexts in which they are used.

Evidence may be presented for individual Outcomes or it may be gathered for the Unit as a whole through integrating assessment for both Outcomes. If the latter approach is used, it must be clear how the evidence covers each Outcome.

For Outcome 1, evidence is required which demonstrates that the learner contributed to, and participated in, at least two practical supervised science experiments. The experiments can be drawn from any science-related context (eg Biology, Chemistry or Physics). The learner should contribute to the planning process for each of the given experiments and carry out tasks associated with each given experiment. Evidence is also required that the learner followed safe working practices appropriate for each given experiment.

For Outcome 2, evidence is required which demonstrates that the learner recorded appropriate pieces of information from each given experiment in an appropriate format. Evidence is also required which demonstrates that the learner drew simple conclusions from each given experiment.

It is expected that learners will receive support to achieve the Outcomes of this Unit.

For this Unit, evidence could include audio and/or audio-visual files recorded on CD and/or DVD, printed materials, observation checklists, logs, recorded oral responses, photographic evidence, video evidence, or their equivalent. Assessors should be confident that there is sufficient evidence to support their judgement that the

Assessment Standards have been met. Evidence may be gathered using the learner's usual means of communication.

Exemplification of assessment is provided in *Unit Assessment Support*. Advice and guidance on possible approaches to assessment is provided in the *Unit Support Notes*.

# Development of skills for learning, skills for life and skills for work

It is expected that learners will develop broad, generic skills through this Unit. The skills that learners will be expected to improve on and develop through the Unit are based on SQA's *Skills Framework: Skills for Learning, Skills for Life and Skills for Work* and drawn from the main skills areas listed below. These must be built into the Unit where there are appropriate opportunities.

- 1 Literacy
- 1.3 Listening and talking
- 2 Numeracy
- 2.3 Information-handling
- 5 Thinking skills
- 5.1 Remembering
- 5.3 Applying
- 5.4 Analysing and evaluating

Amplification of these is given in SQA's *Skills Framework: Skills for Learning, Skills for Life and Skills for Work.* The level of these skills should be at the same SCQF level as the Unit and be consistent with the SCQF level descriptor. Further information on building in skills for learning, skills for life and skills for work is given in the *Unit Support Notes.* 

# **Administrative information**

Published:	January 2015 (version 1.0)
Superclass:	RA

## **History of changes**

Description of change	Authorised by	Date
	Description of change	Description of change Authorised by

This specification may be reproduced in whole or in part for educational purposes provided that no profit is derived from reproduction and that, if it is reproduced in part, the source is acknowledged. Additional copies of this Unit can be downloaded from SQA's website at **www.sqa.org.uk**.

Note: readers are advised to check SQA's website: <a href="www.sqa.org.uk">www.sqa.org.uk</a> to ensure they are using the most up-to-date version of the Unit Specification.

© Scottish Qualifications Authority 2015