



National 2
unit
specification



Unit specification

Science in the Environment: Living Things (National 2)

Unit code:	J5HJ 72
SCQF:	level 2 (6 SCQF credit points)
Valid from:	session 2021–22

This document provides detailed information about the unit to ensure consistent and transparent assessment year on year.

This document is for teachers and lecturers and contains all the mandatory information required to deliver and assess the unit.

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Unit outline

The aim of this unit is to provide learners with opportunities to explore the human body and different systems in the human body, as well as the characteristics of other living things. The unit raises learner's awareness of their own bodies and the differences between themselves, other humans, and other living things.

Learners who complete this unit will be able to:

- 1 participate in activities to explore the human body
- 2 participate in activities to explore other living things

This unit is a mandatory unit of the National 2 Science in the Environment course and is also available as a freestanding unit. Please read this unit specification in conjunction with the unit support notes, which provide advice and guidance on delivery, assessment approaches, and developing 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. Learners should have the skills, knowledge and understanding required by one or more of the following, or have equivalent qualifications and/or experience:

It may help if learners complete some units at SCQF levels 1 or 2 before they start this unit but this is not a requirement for entry.

Relevant experiences and outcomes may provide an appropriate basis for doing this unit.

Standards

Outcomes and assessment standards

Outcome 1

1 Participate in activities to explore the human body by:

- 1.1 identifying the function and position of the main parts of the human body
- 1.2 carrying out experiments to explore different systems in the human body

Outcome 2

2 Participate in activities to explore other living things by:

- 2.1 sorting living things into broad groups according to their characteristics
- 2.2 identifying the links in a food chain

Evidence requirements for the unit

You should use your professional judgement, subject knowledge and experience, and understanding of your learners, to determine the most appropriate ways to generate evidence, and which conditions and contexts to use.

Evidence for this unit could include observation checklists, logs, short recorded oral responses, photographic evidence or equivalent. You should be confident that there is enough evidence to support your judgement that the assessment standards have been met:

- ◆ outcome 1: the learner must identify at least four parts of the human body and explore at least two systems in the human body
- ◆ outcome 2: the learner must sort at least two living things into appropriate groups depending on their characteristics. They must also be able to identify the components of simple food chains of at least three links

Learners will normally receive a high degree of support to achieve the outcomes of the unit. It is your responsibility to ensure that the level of support is appropriate for the requirements of the unit.

Unit assessment support provides exemplification of assessment.

Skills for learning, skills for life and skills for work

This unit helps learners to develop broad, generic skills. These skills are based on [SQA's Skills Framework: Skills for Learning, Skills for Life and Skills for Work](#) and draw from the following main skills areas:

1 Literacy

1.2 Writing

1.3 Listening and talking

5 Thinking skills

5.1 Remembering

You must build these skills into the unit at an appropriate level, where there are suitable opportunities.

Equality and inclusion

This unit is designed to be as fair and as accessible as possible with no unnecessary barriers to learning or assessment.

You should take into account the needs of individual learners when planning learning experiences, selecting assessment methods or considering alternative evidence. The unit support notes provide further information.

Guidance on assessment arrangements for disabled learners and/or those with additional support needs is available on the assessment arrangements web page:

www.sqa.org.uk/assessmentarrangements

Further information

The following links provide useful information and background:

- ◆ [National 2 web page](#)
- ◆ [Building the Curriculum 3 to 5](#)
- ◆ [Guide to Assessment](#)
- ◆ [SCQF Handbook: User Guide](#)
- ◆ [SQA Skills Framework: Skills for Learning, Skills for Life and Skills for Work](#)
- ◆ [Skills for Learning, Skills for Life and Skills for Work: Using the Curriculum Tool](#)
- ◆ [SQA e-assessment web page](#)

Appendix: unit support notes

Introduction

These support notes are not mandatory. They provide advice and guidance to teachers and lecturers on approaches to delivering the unit. Please read these unit support notes in conjunction with the unit specification, course specification, course support notes and appropriate assessment support materials.

Developing skills, knowledge and understanding

The course support notes provide information about skills, knowledge and understanding.

If this unit is being delivered on a freestanding basis, you are free to select the skills, knowledge, understanding and contexts that are most appropriate.

Approaches to learning and teaching

This section provides general advice and guidance on approaches to learning and teaching that you can use to deliver this unit.

At SCQF level 2, learners will take part at different levels of participation and with varying degrees of support. Some learners may:

- ◆ require regular direction and prompting to enable them to take part
- ◆ take part independently or with limited support

You should give learners as much support as they need to engage with learning, teaching and assessment activities while maintaining the integrity of the outcomes and assessment standards.

The following table provides examples of approaches to learning and teaching. These may also provide naturally occurring evidence that you can use to assess learners against the assessment standards.

Science in the Environment: Living Things	
<p>Outcome 1: participate in activities to explore the human body</p> <p>Outcome 2: participate in activities to explore other living things</p>	
Assessment standards	Approaches for learning and teaching
1.1 identifying the function and position of the main parts of the human body	<p>The learner should identify the position and function of any four of the following parts of the human body:</p> <ul style="list-style-type: none"> ◆ eyes ◆ ears ◆ nose ◆ tongue ◆ heart ◆ lungs ◆ brain ◆ stomach ◆ bones <p>Learners could identify these by adding labels to a picture of the human body, or by the learner pointing to the relevant position on their own body.</p>
1.2 carrying out experiments to explore different systems in the human body	<p>Systems in the human body could include:</p> <ul style="list-style-type: none"> ◆ breathing ◆ blood circulation ◆ muscular system ◆ reflexes ◆ vision ◆ hearing <p>The experiments should be simple and focus on one system at a time, for example:</p> <ul style="list-style-type: none"> ◆ an experiment involving a lens to explore how the human eye focuses ◆ simple knee-jerk reflex experiments ◆ hearing experiments involving drums and their vibration to explore how the human ear works ◆ a tea light in a sealed jar, running out of oxygen ◆ lifting a small weight lots of times with one arm until the muscle starts to feel sore

Assessment standards	Approaches for learning and teaching
2.1 sorting living things into broad groups according to their characteristics	<p>Learners could observe and discuss the characteristics of a range of living things. They should work towards being able to sort living things into different groups based on them having similar characteristics.</p> <p>The groups learners use to classify living things should be simple, for example:</p> <ul style="list-style-type: none"> ◆ insects ◆ fish ◆ birds ◆ amphibians ◆ reptiles ◆ plants ◆ mammals <p>Characteristics could include:</p> <ul style="list-style-type: none"> ◆ ability to fly ◆ feathers ◆ fur ◆ live on land ◆ scales ◆ can breathe under water
2.2 identifying the links in a food chain	<p>The learner should produce a three-layer food chain, for example grain–mice–cats.</p> <p>Learners could watch short films about plants and animals. You could give them different pictures of the plants and animals they watched and ask them to order the pictures into simple food chains.</p>

Approaches to assessment and gathering evidence

There is no external assessment for National 2 units. All units are internally assessed against the requirements outlined and described in the unit specification and the unit assessment support pack.

To achieve the unit, learners must achieve all the unit outcomes.

At SCQF level 2, most evidence for assessment is gathered on a naturally occurring, ongoing basis, rather than from more formal assessment methods. There are many contexts that you might use for gathering evidence, for example extra-curricular and/or outdoor learning.

Naturally occurring evidence is evidence that occurs in and as part of learning and teaching, which you can gather for assessment purposes in a variety of ways:

- ◆ observation of evidence demonstrated during an activity (using an observation checklist, visual recording, photography or equivalent)
- ◆ oral questioning before, during, and on completion of an activity (recorded using an audio-visual or audio recording or using your detailed written notes as evidence)
- ◆ learning and teaching activities that generate physical evidence for assessment
- ◆ identifying opportunities to record evidence during out-of-centre activities

You should focus on small, well-defined steps in learning. In this way, the learner is more likely to achieve success in the units and in any subsequent learning.

Learners benefit from receiving accurate and regular feedback regarding their learning. This helps to ensure they are actively involved in the assessment process. It is important that you use different approaches to assessment to suit the varying needs of learners.

Examples of evidence, and how you can gather evidence for each assessment standard in this unit:

- ◆ **Assessment standards 1.1 and 1.2:** learners could label a diagram of the human body and record simple results from experiments involving systems in the body. Alternatively, you could film or photograph learners taking part in the experiments. You could also complete an observation checklist to show that a learner has completed the task.
- ◆ **Assessment standards 2.1 and 2.2:** learners could provide evidence in the form of a poster or worksheet (with support if required) to show they can sort living things into different groups with similar characteristics, and to show that they can create simple food chains.

Combining assessment within units

The assessment of the activities in this unit could be combined with the assessments for other National 2 units, where appropriate.

Developing skills for learning, skills for life and skills for work

This section highlights the skills for learning, skills for life and skills for work that learners should develop in this unit. These are based on SQA's Skills Framework: Skills for Learning, Skills for Life and Skills for Work and should be built into the unit where there are appropriate opportunities. The level of these skills will be appropriate to the level of the unit.

Some examples of potential opportunities to practise or improve these skills are provided in the following table.

Skills for learning, skills for life and skills for work	Approaches for learning and teaching
1 Literacy 1.2 Writing: <ul style="list-style-type: none"> ♦ writing means the ability to create texts which communicate ideas, opinions and information, to meet a purpose and within a context 1.3 Listening and talking: <ul style="list-style-type: none"> ♦ listening means the ability to understand and interpret ideas, opinions and information presented orally for a purpose and within a context, drawing on non-verbal communication as appropriate ♦ talking means the ability to communicate orally ideas, opinions and information for a purpose and within a context 	<p>Learners could write the names for different parts of the body and the names and characteristics of different living things.</p> <p>Where appropriate, learners could use their normal communication method during learning and teaching activities to communicate, for example:</p> <ul style="list-style-type: none"> ♦ when identifying the different parts of the human body and the different systems in the human body ♦ when sorting living things into different groups
5 Thinking skills 5.1 Remembering: <ul style="list-style-type: none"> ♦ remembering is the ability to identify, recognise and recall facts, events and sequences 	<p>You could ask learners to remember the names for different body parts, and/or different animals and what they look like.</p>

Administrative information

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History of changes

Version	Description of change	Date

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