

Level 1 Award, Certificate And Diploma in Land-based Studies (QCF) (0361)



Qualification handbook
Version 2.1



Publications and enquiries

Publications are available from

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We believe that it is in NPTC's interests, and the interests of those who work for or in association with NPTC, to ensure that the human resources, talents and skills available throughout the community are considered when employment or work opportunities arise. To this end, within the framework of the law, we are committed, wherever practicable, to achieving and maintaining a workforce which broadly reflects the local community in which we operate. Every step will be taken to ensure that individuals are treated equally and fairly and that decisions on recruitment, selection, training, promotion and career management are based solely on objective and job related criteria.

Similarly, we will strive to ensure that all learners have equal access to assessment and that they are protected against unfair or unlawful discrimination, unnecessary barriers to assessment or harassment during assessment.

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Contents

	page
General information	5
Introduction	6
Foundation Learning Tier (FLT) and Progression Pathways	7
Level 1 Award, Certificate and Diploma in Land-based Studies - units	8
Assessment and quality assurance	13
Assessment strategy	12
Course design and guided learning hours	14
Centre and scheme approval	15
Registration and certification	16
Appeals and equal opportunities	20
Test specification	21
Health and safety, spiritual etc, environmental, European issues	22
Units:	
Unit 101 Safe and effective working practices in land-based industries	25
Unit 102 Develop performance in land-based industries	31
Unit 103 Industrial experience in land-based industries	35
Unit 104 Identify plants	39
Unit 105 Identify common pests and diseases	43
Unit 106 Use transport and assist with maintenance of tools and equipment	47
Unit 107 Contribute to the establishment of plants	53
Unit 108 Contribute to the maintenance of plants	57
Unit 109 Contribute to the propagation of plants	61
Unit 110 Contribute to the establishment and maintenance of lawns	67
Unit 111 Contribute to the construction and maintenance of structures and surfaces	73
Unit 112 Carry out basic floristry tasks	79
Unit 113 Identify flowers, foliage and plants	85
Unit 114 Produce and maintain shop displays	89
Unit 115 Produce planted designs	93
Unit 116 Assemble basic floral designs	97
Unit 117 Assist with maintaining the health and wellbeing of animals	101
Unit 118 Assist with the care of animals	109
Unit 119 Assist with the movement, handling and accommodation of animals	113
Unit 120 Introduction to crop systems	119
Unit 121 Assist with the repair and maintenance of structures in the countryside	123
Unit 122 Assist with the repair and maintenance of surfaces and ancillary structures in the countryside	129
Unit 123 Carry out tractor operations	135
Unit 124 Introduction to wildlife and conservation	139
Unit 125 Assist with the establishment of plants and sites in the countryside	143
Unit 126 Assist with the maintenance of plants and sites in the countryside	149
Unit 127 Animals in the wild and in society	155
Unit 128 Assist with feeding and watering animals	159
Unit 129 Assist with the preparation and maintenance of animal accommodation	165

	page
Unit 130 Assist with the handling and restraint of animals	171
Unit 131 Assist with the exercise of animals	177
Unit 132 Assist with the preparation for exercise and aftercare of horses	183
Unit 133 Exercise horses under supervision	193
Unit 134 Maintain the health of horses	197

General information

These qualifications have been designed by NPTC to support government initiatives towards the Qualifications and Credit Framework (QCF). They can contribute towards the knowledge and understanding required for the related work-based qualification while not requiring or proving evidence of occupational competence.

NPTC is recognised as a Component Awarding Body (CAB) for the new Diploma qualifications. The NPTC Level 1 Certificate in Land-based Studies is recognised as Additional and Specialist Learning (ASL) for the Environmental and Land-based Diploma.

General structure

The qualifications are made up of units expressed in a standard format. Each unit is preceded by:

- the level, GLH and credit value of the unit
- the rationale for the unit
- the outcomes
- the assessment methods
- the relationship of the unit to the appropriate National Occupational Standards

Level 1 Award, Certificate and Diploma in Land-based Studies (0361 -01)

Introduction

The purpose of these qualifications is to provide centre-based provision designed to act as a starting point for people who may want to progress into further education and/or employment in the sector.

Level 1 Award in Land-based Studies

The aim of the qualification is to provide bite sized learning (knowledge and skills) which could allow progression to further learning or qualifications (such as the Certificate in Land-based Studies) or into employment opportunities.

Level 1 Certificate in Land-based Studies

The aim of the qualification is to provide a sound knowledge and skills base which will allow progression to further learning or qualifications, or into employment opportunities. This certificate is also designed to be suitable for Additional and Specialist Learning (ASL) for the Foundation Diploma.

Level 1 Diploma in Land-based Studies

The aim of the qualification is to provide a sound knowledge and skills base which will allow progression to further learning or qualifications, or into employment opportunities.

QCA accreditation numbers

Level 1 Award in Land-based Studies – 500/6256/6

Level 1 Certificate in Land-based Studies – 500/6257/8

Level 1 Diploma in Land-based Studies – 500/6268/2

The Foundation Learning Tier (FLT)

Overview of the Foundation Learning Tier

The Foundation Learning Tier is used to describe the range of provision and learning at entry level and level 1. Specifically it refers to units and qualifications at entry level and level 1 of the Qualifications and Credit Framework (QCF)., which for a limited transitional phase will be supplemented by an agreed range of valuable provision which supports engagement activity for young people and adults. By 2010 it is intended that all vocational qualifications and other appropriate units and qualifications will be accredited into the QCF to support wider implementation of the FLT with clear progression routes through entry level and level 1 to a range of appropriate destinations.

The overarching aims of the Foundation Learning Tier are to:

- support improved engagement, participation, achievement and progression through entry level and level 1 towards level 2 or, where relevant and appropriate, towards other destinations such as supported employment and independent living;
- bring coherence to programmes of study at entry level and level 1 to support progression for young people and adults, including supporting the full participation of all young people in learning;
- ensure learners gain a minimum level and range of skills providing a sound foundation for further learning and employment; and,
- support the delivery of quality learning programmes that are personalised and appropriate to the learner's needs which help to encourage raised aspirations and a culture of lifelong learning.

Destinations (previously Progressions Pathways)

The qualifications have been developed in such a way to ensure that they support destinations for learners aged 14 – 19 years old and for adult (post -19 learners). Destinations within the FLT will encompass:

- 14-19 national suites
- Full level 2 provision for adults
- Employment (ideally sustainable employment with training)
- Supported employment
- Independent living

Please note: the existing NPTC Entry Level Certificate in Land-based Studies on the NQF will no longer be open for registrations beyond 31 August 2009.

Level 1 Award, Certificate and Diploma in Land-based Studies (0361-01)

Units (All units are 50 GLH and 6 credits)

- 101: Safe and effective working practices in land-based industries
- 102: Develop performance in land-based industries
- 103: Industrial experience in land-based industries
- 104: Identify plants
- 105: Identify common pests and diseases
- 106: Use transport and assist with maintenance of tools and equipment
- 107: Contribute to the establishment of plants
- 108: Contribute to the maintenance of plants
- 109: Contribute to the propagation of plants
- 110: Contribute to the establishment and maintenance of lawns
- 111: Contribute to the construction and maintenance of structures and surfaces
- 112: Carry out basic floristry tasks
- 113: Identify flowers, foliage and plants
- 114: Produce and maintain shop displays
- 115: Produce planted designs
- 116: Assemble basic floral designs
- 117: Assist with maintaining the health and wellbeing of animals
- 118: Assist with the care of animals
- 119: Assist with the movement, handling and accommodation of animals
- 120: Introduction to crop systems
- 121: Assist with the repair and maintenance of structures in the countryside
- 122: Assist with the repair and maintenance of surfaces and ancillary structures in the countryside
- 123: Carry out tractor operations
- 124: Introduction to wildlife and conservation
- 125: Assist with the establishment of plants and sites in the countryside
- 126: Assist with the maintenance of plants and sites in the countryside
- 127: Animals in the wild and in society
- 128: Assist with feeding and watering animals
- 129: Assist with the preparation and maintenance of animal accommodation
- 130: Assist with the handling and restraint of animals
- 131: Assist with the exercise of animals
- 132: Assist with the preparation for exercise and aftercare of horses
- 133: Exercise horses under supervision
- 134: Maintain the health of horses
- 135: Portfolio (grading module)

Rules of combination for 0361-01

Award

Level 1 Award in Land-based Studies	
Rules for achievement of qualification	Minimum 6 credits from 101 to 134 Plus 900 (certification module)

Certificate

Level 1 Certificate in Land-based Studies (Non-endorsed)	
Rules for achievement of qualification	6 credits from 101 12 credits from any of 103 to 134 Plus 135 (grading module) Plus 901 (certification module)

Level 1 Certificate in Land-based Studies (Agriculture)	
Rules for achievement of qualification	6 credits from 101 12 credits from any of 103, 106, 117 – 120, 123 – 124 Plus 135 (grading module) Plus 903 (certification module)

Level 1 Certificate in Land-based Studies (Animal care)	
Rules for achievement of qualification	6 credits from 101 12 credits from any of 103, 117, 119, 124, 127 - 131 Plus 135 (grading module) Plus 905 (certification module)

Level 1 Certificate in Land-based Studies (Environmental conservation)	
Rules for achievement of qualification	6 credits from 101 12 credits from any of 103, 106, 121-126 Plus 135 (grading module) Plus 907 (certification module)

Level 1 Certificate in Land-based Studies (Floristry)	
Rules for achievement of qualification	6 credits from 101 12 credits from any of 103, 112 – 116 Plus 135 (grading module)

	Plus 909 (certification module)
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Level 1 Certificate in Land-based Studies (Horse care)	
Rules for achievement of qualification	6 credits from 101 12 credits from any of 103, 117, 119, 128 - 134 Plus 135 (grading module) Plus 911 (certification module)

Level 1 Certificate in Land-based Studies (Horticulture)	
Rules for achievement of qualification	6 credits from 101 12 credits from any of 103 – 111 Plus 135 (grading module) Plus 913 (certification module)

Diploma

Level 1 Diploma in Land-based Studies (Non-endorsed)	
Rules for achievement of qualification	6 credits from 101 6 credits from 102 6 credits from 106, 109, 112, 117, 124, 132 Min. 24 credits from any of 103 – 105, 107 – 108, 110 - 111, 113 – 116, 118 - 123, 125 – 131, 133 -134 Plus 135 (grading module) Plus 902 (certification module)

Level 1 Diploma in Land-based Studies (Agriculture)	
Rules for achievement of qualification	6 credits from 101 6 credits from 102 6 credits from 106 Min. 24 credits from any of 103, 117 – 120, 123 – 124 Plus 135 (grading module) Plus 904 (certification module)

Level 1 Diploma in Land-based Studies (Animal care)	
Rules for achievement of qualification	6 credits from 101 6 credits from 102 6 credits from 117

	Min. 24 credits from any of 103, 119, 124, 127 - 131 Plus 135 (grading module) Plus 906 (certification module)
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Level 1 Diploma in Land-based Studies (Environmental conservation)	
Rules for achievement of qualification	6 credits from 101 6 credits from 102 6 credits from 124 Min. 24 credits from any of 103, 106, 121 – 123, 125 - 126 Plus 135 (grading module) Plus 908 (certification module)

Level 1 Diploma in Land-based Studies (Floristry)	
Rules for achievement of qualification	6 credits from 101 6 credits from 102 6 credits from 112 Min. 24 credits from any of 103, 113 – 116 Plus 135 (grading module) Plus 910 (certification module)

Level 1 Diploma in Land-based Studies (Horse care)	
Rules for achievement of qualification	6 credits from 101 6 credits from 102 6 credits from 132 Min. 24 credits from any of 103, 117, 119, 128 – 131, 133 - 134 Plus 135 (grading module) Plus 912 (certification module)

Level 1 Diploma in Land-based Studies (Horticulture)	
Rules for achievement of qualification	6 credits from 101 6 credits from 102 6 credits from 109 Min. 24 credits from any of 103 – 108, 110, 111 Plus 135 (grading module) Plus 914 (certification module)

Assessment and quality assurance

Quality assurance

Approved centres must have effective quality assurance systems to ensure optimum delivery and assessment of qualifications. Quality assurance includes initial centre approval, qualification approval and the centre's own internal procedures for monitoring quality. Centres are responsible for internal quality assurance and City & Guilds is responsible for external quality assurance. All external quality assurance processes reflect the minimum requirements for verified and moderated assessments, as detailed in the Centre Assessment Standards Scrutiny (CASS), section H2 of Ofqual's General Conditions. For more information on both CASS and City and Guilds Quality Assurance processes visit: the [What is CASS?](#) and [Quality Assurance Standards](#) documents on the City & Guilds website.

National standards and rigorous quality assurance are maintained by the use of:

- NPTC set and marked multiple choice test
- NPTC assignments, marked by the centre according to externally set marking criteria, with quality assurance provided by the centre internal verifier and monitored by NPTC's external verification system, to ensure that national standards are maintained

Quality assurance includes initial centre approval, qualification approval, the centre's own procedures for monitoring quality and NPTC's ongoing monitoring by an External Verifier. Details of NPTC's criteria and procedures, including roles of centre staff and External Verifiers can be found in *Providing NPTC Qualifications - a guide to centre and qualification approval*. See www.nptc.org.uk.

Multiple choice test

Unit 101 is assessed through a single multiple choice test (module 101) that covers the knowledge and understanding of that unit (see Test Specification). It is not assessed through an assignment.

The multiple choice question test is available online via the City & Guilds Global Online Assessment system (GOLA). See **On-line assessment requirements** for more details.

Assignments

Units 102 to 134 will be tested by assignments. Assignments assess practical activities and also underpinning knowledge for those units.

All assignments are made up of a series of tasks, which are assessed as PASS or FAIL only. Tasks can vary in format. Some may be performance based and others will focus on the underpinning knowledge of the unit.

NPTC provides an assignment guide containing the assignments. As assignments are designed to *sample* the practical activities and underpinning knowledge, it is essential that centres ensure

that learners cover the content of the whole unit. The assignment guide is available on the NPTC website www.nptc.org.uk.

For learners who require adjustments to assessment please see the NPTC document '*Application of Reasonable Adjustments and Special Consideration in Vocational Qualifications*' at www.nptc.org.uk.

Portfolio of evidence (Certificate and Diploma only)

Learners will collect a portfolio of evidence to demonstrate their achievements which determines the overall grading for the qualification – Pass, Merit or Distinction. It should include the marking check lists for the assignments and samples of work logs, photographs and witness testimonies.

The portfolio will be assessed and internally verified by the centre. This module (135) will be graded (Pass, Merit or Distinction). A Pass is the achievement level required for the knowledge and understanding in the qualification and generally represents the ability to follow instructions and procedures. Merit and Distinction represent increasing levels of ability to adapt to changing circumstances and to independently resolve problems.

On-line assessment requirements

The 0361-101 assessment is available only on-line through the NPTC City & Guilds GOLA system.

The test will comprise multiple choice items in accordance with the test specifications provided. The entire test will be conducted via the learner's VDU. All data relating to the assessment will be held by City & Guilds with results and performance feedback being delivered back to the approved centre.

NPTC City & Guilds will continue to apply its rigorous quality control procedures to the production, editing, marking, moderating and revision of all questions whilst at the same time applying a robust security system to prevent assessments being accessed or drawn down by unauthorised persons or for purposes beyond those authorised.

GOLA registration

Centres are required to register as a GOLA centre before any tests can be scheduled. The form for this is available from the website www.cityandguilds.com/gola

A centre only needs to register once for GOLA

Invigilation

Centres will be expected to provide invigilators for the examination procedures. The invigilator will be responsible for the conduct and integrity of the examination. The person(s) undertaking this role will need to:

- a) be familiar with the content of the NPTC/City & Guilds Conduct of examinations document
- b) accurately observe the time allotted for the examination
- c) read out the 'rules to learners' prior to commencement of the examination
- d) ensure compliance with all other regulations relating to the examination.

Invigilators ideally will not be involved in training the learners. However, where this is unavoidable, the trainer will not be allowed to be the only invigilator involved for that examination.

Course Design

Tutors/assessors should familiarise themselves with the structure and content of the qualifications before designing an appropriate course; in particular they are advised to consider the knowledge and understanding requirements of the units.

NPTC does not itself provide courses of instruction or specify entry requirements. As long as the requirements for the award are met, tutors/assessors may design courses of study in any way that they feel best meets the needs and capabilities of the learners. Units are broadly the same size and centres may deliver them in any order they wish. Centres may wish to introduce other topics as part of the programme which will not be assessed through the qualifications, e.g. to meet local needs.

It is recommended that centres cover the following in the delivery of the course, where appropriate:

- Health and Safety considerations, in particular the need to impress to learners that they must preserve the health and safety of others as well as themselves
- Functional skills
- Environmental education, related European issues
- Spiritual, moral, ethical, social and cultural issues.

Guided Learning Hours

It is recommended that:

Level 1 Award in Land-based Studies – 50 GLH (6 credits)

Level 1 Certificate in Land-based Studies – 150 GLH (18 credits)

Level 1 Diploma in Land-based Studies – 350 GLH (42 credits)

This may be on a full time or part time basis.

No specific prior qualifications, learning or experience are required for learners undertaking the qualifications. However, the nature of both the learning and assessment required for the qualification is such that learners will need basic literacy and numeracy skills: ie the ability to read and interpret written tasks and to write answers in a legible and understandable form. Learners will also need to be able to organise written information clearly and coherently, although they will not be assessed for spelling or grammatical accuracy unless this is part of the assessment criteria e.g. plant identification.

Centres will need to make an initial assessment of each learner and decide on the most appropriate level of qualification.

Centre and scheme approval

Centres wishing to offer NPTC qualifications must gain approval.

Existing NPTC/City & Guilds centre already offering the NQF version of the qualification (0360 - 12, -13, -14 or -15) can apply to Verification to fast-track to the new QCF version 0361-01)

Existing NPTC/City & Guilds centres that do not offer the NQF version of the qualification (0360 - 12, -13, -14 OR -15) will need to get specific qualification approval to run this qualification.

New centres must apply for centre and qualification approval.

Full details of the process for both centre and qualification approval are given in *Providing NPTC qualifications – a guide to centre and qualification approval* which is available from www.nptc.org.uk

NPTC/City & Guilds reserve the right to suspend an approved centre, or withdraw their approval from an approved centre to conduct a particular NPTC or City & Guilds qualification, for reasons of debt, malpractice or for any reason that may be detrimental to the maintenance of authentic, reliable and valid qualifications or that may prejudice the name of NPTC or City & Guilds.

Registration and certification

All learners will need to be registered on 0361-01 regardless of which qualification they are aiming to achieve. The Rules of Combination determine the credit and combination of modules required to achieve a specific qualification. Depending upon the Rule of Combination achieved, centres will then need to submit the relevant 'certification module' that will determine the certificate that is issued. **Note:** A module is the term given to a component part of the qualification.

See the City & Guilds catalogue for full details www.cityandguilds.com

Unit		Module	
Unit 101	Safe and effective working practices in land-based industries	101	GOLA multiple choice test
Unit 102	Develop performance in land-based industries	102	Assignment
Unit 103	Industrial experience in land-based industries	103	Assignment
Unit 104	Identify plants	104	Assignment
Unit 105	Identify common pests and diseases	105	Assignment
Unit 106	Use transport and assist with maintenance of tools and equipment	106	Assignment
Unit 107	Contribute to the establishment of plants	107	Assignment
Unit 108	Contribute to the maintenance of plants	108	Assignment
Unit 109	Contribute to the propagation of plants	109	Assignment
Unit 110	Contribute to the establishment and maintenance of lawns	110	Assignment
Unit 111	Contribute to the construction and maintenance of structures and surfaces	111	Assignment
Unit 112	Carry out basic floristry tasks	112	Assignment
Unit 113	Identify flowers, foliages and plants	113	Assignment
Unit 114	Produce and maintain shop displays	114	Assignment
Unit 115	Produce planted designs	115	Assignment

Unit 116	Assemble basic floral designs	116	Assignment
Unit		Module	
Unit 117	Assist with maintaining the health and wellbeing of animals	117	Assignment
Unit 118	Assist with the care of animals	118	Assignment
Unit 119	Assist with the movement, handling and accommodation of animals	119	Assignment
Unit 120	Introduction to crop systems	120	Assignment
Unit 121	Assist with the repair and maintenance of structures in the countryside	121	Assignment
Unit 122	Assist with the repair and maintenance of surfaces and ancillary structures in the countryside	122	Assignment
Unit 123	Carry out tractor operations	123	Assignment
Unit 124	Introduction to wildlife and conservation	124	Assignment
Unit 125	Assist with the establishment of plants and sites in the countryside	125	Assignment
Unit 126	Assist with the maintenance of plants and sites in the countryside	126	Assignment
Unit 127	Animals in the wild and in society	127	Assignment
Unit 128	Assist with feeding and watering animals	128	Assignment
Unit 129	Assist with the preparation and maintenance of animal accommodation	129	Assignment
Unit 130	Assist with the handling and restraint of animals	130	Assignment
Unit 131	Assist with the exercise of animals	131	Assignment
Unit 132	Assist with the preparation for exercise and aftercare of horses	132	Assignment
Unit 133	Exercise horses under supervision	133	Assignment

Unit 134	Maintain the health of horses	134	Assignment
	Portfolio of evidence	135	Grading

Qualification	Module	
Level 1 Award in Land-based Studies	900	Certification
Level 1 Certificate in Land-based Studies (Non-endorsed)	901	Certification
Level 1 Certificate in Land-based Studies (Agriculture)	903	Certification
Level 1 Certificate in Land-based Studies (Animal care)	905	Certification
Level 1 Certificate in Land-based Studies (Environmental conservation)	907	Certification
Level 1 Certificate in Land-based Studies (Floristry)	909	Certification
Level 1 Certificate in Land-based Studies (Horse care)	911	Certification
Level 1 Certificate in Land-based Studies (Horticulture)	913	Certification
Level 1 Diploma in Land-based Studies (Non-endorsed)	902	
Level 1 Diploma in Land-based Studies (Agriculture)	904	Certification
Level 1 Diploma in Land-based Studies (Animal care)	906	Certification
Level 1 Diploma in Land-based Studies (Environmental conservation)	908	Certification
Level 1 Diploma in Land-based Studies (Floristry)	910	Certification
Level 1 Diploma in Land-based Studies (Horse care)	912	Certification
Level 1 Diploma in Land-based Studies (Horticulture)	914	Certification

- Learners must be registered at the beginning of their course. Centres should submit registrations using Form S (Registration) under scheme/complex no: 0361-01. All learners should be registered on 0361-01 regardless of which qualification they intend on taking.
- When assignments have been successfully completed (and the portfolio completed and graded in the case of the Certificate and Diploma), results should be submitted on Form S (Results submission). Centres should note that results will NOT be processed by NPTC until verification records are complete.

- In order to determine the certification requirements in terms of level and size (Award, Certificate or Diploma) of the qualification, centres must also submit the relevant certification module (900 – 914).
- Learners achieving one or more assessment components will receive a Certificate of Unit Credit listing the assessment components achieved. Learners achieving the number and combination of assessment components required for a qualification will, in addition, be issued a qualification certificate.
- On-line GOLA tests are available on demand following registration. Learners must be date scheduled for the on-line tests via the GOLA system. This must be done at least 48 hours before learners sit the on-line tests.
- Assignment results do not combine with the result of the MCQ test to give an overarching grade. However, a learner must pass all appropriate unit assignments and the MCQ test to be certificated for the overarching award.

Appeals and equal opportunities

Centres must have their own auditable, appeals procedure. If a learner is not satisfied with the examination conditions or a learner feels that the opportunity for examination is being denied, the Centre Manager should, in the first instance, address the problem. If, however, the problem cannot be resolved, NPTC will arbitrate and an External Verifier may be approached to offer independent advice. All appeals must be clearly documented by the Centre Manager and made available to the External Verifier or NPTC if advice is required.

Should occasions arise when centres are not satisfied with any aspect of the external verification process, they should contact Verification Services at NPTC.

Access to the qualification is open to all, irrespective of gender, race, creed, age or special needs. The Centre Manager should ensure that no learner is subjected to unfair discrimination on any grounds in relation to access to assessment and to the fairness of the assessment. The regulators require NPTC to monitor centres to check whether equal opportunities policies are being adhered to.

Test specification

The knowledge requirements will be assessed by one multiple choice paper covering unit 101.

Paper title: Level 1 Land-based Studies (Unit 101)			
Test duration: 45 minutes			
Total number of items: 64			
Unit		Number of questions (1 mark each)	%
1	1 select, use and maintain equipment, tools and PPE	4	25
	2 follow safe working practices	6	37.5
	3 use reporting procedures	2	12.5
	4 maintain a safe and tidy work environment	4	25
Totals		16	100

Health and safety, spiritual etc, environmental and European issues

The units provide opportunities to address the following issues as indicated:

Units	Spiritual, Moral, Ethical, Social, Economic and Cultural	Environmental and Sustainable Development	Health and Safety	European Development
101	X	X	X	X
102	X		X	
103	X	X	X	
104		X		
105	X	X	X	
106	X	X	X	X
107		X	X	
108		X	X	
109		X	X	
110		X	X	
111		X	X	
112	X	X	X	X
113	X	X	X	X
114	X	X	X	
115	X	X	X	X
116	X	X	X	
117	X	X	X	
118	X	X	X	
119	X	X	X	
120		X	X	
121		X	X	
122		X	X	
123	X	X	X	
124	X	X		
125	X	X	X	
126	X	X	X	
127	X	X	X	

128	X		X	
129	X	X		
130		X	X	
131		X	X	
132	X		X	
133	X		X	
134	X		X	

Unit 101 Safe and effective working practices in land-based industries

Level 1	50 GLH	6 credits
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Rationale

Health and safety and its role in reducing accidents and lowering risk are a vital part of working practices. This unit is concerned with learners following the correct procedures outlined by the employer, recommended codes of practice and current legislation. Reporting procedures and the correct use of PPE, other equipment and the workplace are also included. The unit will be taught using a range of situations including working with animals and machinery. The delivery and assessment of this unit should be as practical as possible and relevant to the route which the learner is taking.

Outcomes

There are four outcomes to this unit. The learner will:

1. select, use, maintain and store equipment, tools and Personal Protective Equipment (PPE)
2. follow safe working practices
3. follow emergency procedures
4. maintain a safe and tidy work environment

Assessment

This unit will be assessed by a multiple-choice question test based on the test specification.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
101	Safe and effective working practices in land-based industries	CU 1	CU 1.1	1 – 9	a-g, j-l

Unit 101

Outcome 1: Select, use, maintain and store equipment, tools and PPE

Practical activities

The learner will be able to:

1. select and use appropriate PPE for a given situation
2. use, maintain and store equipment and tools safely and correctly

Underpinning knowledge

The learner will be able to:

1. state the need for PPE in various work situations
2. state how to care check and maintain PPE and the actions to take in the event of faults
3. list procedures for storage of equipment and maintenance of equipment and materials, to include:
 - a) PPE
 - b) hand tools
 - c) powered equipment
 - d) manual handling equipment
 - e) materials specific to operations

Outcome 2: Follow safe working practices

Practical activities

The learner will be able to:

1. work according to training, instructions and current legislation

Underpinning knowledge

The learner will be able to:

1. list their responsibilities as an employee under relevant health and safety legislation
2. identify hazard and safety symbols
3. state the role of risk assessment in reducing risk in the relevant work area to include
 - a. hazard
 - b. severity
 - c. likelihood
 - d. control
4. list procedures to use in order to work safely, to include
 - a. safe manual handling
 - b. safe lifting procedures
 - c. machinery operation and maintenance.

Outcome 3: Follow emergency procedures

Practical activities

The learner will be able to:

1. complete an entry into an accident book for a given situation and take appropriate action
2. follow emergency procedures

Underpinning knowledge

The learner will be able to:

1. state why accidents, incidents and problems should be reported to a supervisor
2. list relevant legislation and reporting procedures to include:
 - a) RIDDOR
 - b) First Aid at Work
 - c) safe procedures
 - d) organisation policy
3. explain emergency procedures

Outcome 4: Maintain a safe and tidy work environment

Practical activities

The learner will be able to:

1. maintain a safe and tidy work area
2. dispose of waste correctly

Underpinning knowledge

The learner will be able to:

1. name hazardous and non-hazardous waste and their possible environmental impact
2. state how to dispose safely of hazardous and non-hazardous waste that may be present in the workplace
3. list the risks of an untidy workplace
4. list the benefits and features of a safe and tidy work environment

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Unit 102 Develop performance in land-based industries

Level 1	50 GLH	6 credits
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Rationale

This unit enables the learner to gain experience of working as an effective team member. It also provides the learner with the opportunity to work alone, developing personal skills and performance.

Outcomes

There are two outcomes to this unit. The learner will be able to:

1. work effectively within a team
2. develop personal performance

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
102	Develop performance in land-based industries	CU 1	CU 1.2	1-5	a, b, d

Unit 102

Outcome 1: Work effectively within a team

Practical activities

The learner will be able to:

1. work effectively with others
2. co-operate with supervisors and others in authority
3. communicate effectively with others
4. demonstrate positive attitude and behaviour
5. state who to ask if advice or clarification is needed
6. state own responsibility for reporting a disagreement.

Underpinning knowledge

The learner will be able to:

1. state the necessity of working effectively with others
2. state the importance of maintaining good working relationships with others
3. name the sources of advice available when clarification is required
 - a. colleagues
 - b. supervisors
 - c. tutors
4. state the importance of communicating with others
5. list positive attitudes and behaviour
 - a. helpful
 - b. pleasant
 - c. polite
 - d. sympathetic
 - e. eager/keen
6. state own responsibilities for reporting a disagreement
 - a. report to supervisor/manager
 - b. report to tutor/assessor
 - c. maintain confidentiality.

Outcome 2: Develop personal performance

Practical activities

The learner will be able to:

1. work effectively as an individual
2. review personal progress with a supervisor
3. record daily activity/task checklists
4. state the benefits of personal performance review and personal targets
5. state the benefits of recording daily work activities/ completing task checklists.

Underpinning knowledge

The learner will be able to:

1. state the importance of working effectively as an individual
2. list own responsibilities in relation to specific tasks to include:
 - a. wear appropriate PPE
 - b. follow information
 - c. seek clarification if required
 - d. report any problems
 - e. observe the Health and Safety at Work Act (HASAWA)
3. state the importance of personal performance reviews to include:
 - a. personal progress
 - b. targets
 - c. areas for improvement
4. state the benefits of personal performance reviews for self and supervisors
5. state the importance of setting personal targets
6. list the importance of recording daily work activities
7. state the importance of completing work activity checklists.

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Unit 103 Industrial experience in land-based industries

Level 1	50 GLH	6 credits
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Rationale

This unit enables learners to gain experience of working within a realistic working environment in industry or at College, under supervision. It also provides learners with the opportunity to develop important personal skills and apply health and safety principles in the workplace.

Outcomes

There are two outcomes to this unit. The learner will be able to:

1. follow simple instructions to complete a task
2. carry out routine tasks and activities under supervision (according to the requirements of the workplace).

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
103	Industrial experience in land-based industries	CU 1	CU 1.1	1-9	a-c, e-g

Unit 103

Outcome 1: Follow simple instructions to complete a task

Practical activities

The learner will be able to:

1. arrive on time, report to supervisor and prepare self for work
2. assist with a practical task
3. leave work area and equipment clean and tidy and report any problems encountered

Underpinning knowledge

The learner will be able to:

1. name the supervisor and identify where to seek advice if necessary
2. list the working times and staffing requirements at the workplace
3. list the PPE required for the workplace:
 - a. overalls
 - b. safety hand and footwear
 - c. helmets (if appropriate)
 - d. goggles and ear protection
 - e. barrier cream and cleansing soaps
4. list the health and safety requirements of the workplace:
 - a. emergency procedures – fire, flooding, security, first aid
 - b. accident book
 - c. safe working practices
 - d. machine and equipment in good repair and tested if required e.g. electrical equipment
 - e. reporting procedures
 - f. Control of Substances Hazardous to Health (COSHH)
 - g. Health and Safety at Work Act 1974 (Health and safety policy)
 - h. risk assessments
 - i. responsibilities of the employer
 - j. responsibilities of the employee
 - k. Provision of Use of Work Equipment Regulations (PUWER).

5. state health and safety notices applicable to the workplace:
 - a. emergency exits
 - b. chemicals
 - c. slippery floors
 - d. electricity and water
 - e. first aid locations
 - f. fire fighting equipment locations
 - g. PPE notices in the workshop/workplace
6. state the procedures for emergency situations in the workplace:
 - a. fire and evacuation procedures
 - b. flooding
 - c. security
 - d. first aid emergencies
7. list the hazards that might exist in the workplace:
 - a. faulty equipment
 - b. use of materials and substances
 - c. unsafe behaviour
 - d. accidental breakages and spillages
 - e. environmental factors
 - f. unsafe working practices
 - g. unguarded equipment and sharp tools
8. state the need for vaccination against tetanus.

Outcome 2: Carry out routine tasks and activities under supervision (according to the requirements of the work place)

Practical activities

The learner will be able to:

1. select suitable equipment to carry out a routine activity
2. complete a record of activities undertaken

Underpinning knowledge

The learner will be able to:

1. list the requirements in terms of routine duties and work quality for a range of tasks:
 - a. work rate
 - b. assisting supervisor
 - c. safe working practices
 - d. health and safety requirements
 - e. reporting problems to supervisor
 - f. completing the task and leaving a clean and tidy environment
2. list the equipment used in the workplace
3. explain briefly where equipment and materials are stored
4. list cleaning agents and their use
5. state the importance of working as a team:
 - a. work rate improves
 - b. good communication
 - c. motivation
 - d. planning work activities
 - e. rotas and responsibilities
6. state the importance of health and safety and security in the workplace:
 - a. Health and Safety at Work Act 1974
 - b. COSHH
 - c. RIDDOR
 - d. employers and employees responsibilities
 - e. security of premises and stock
 - f. PUWER
7. state the need to record activities on a job sheet or record card:
 - a. communication
 - b. for production purposes and for effective organisation
 - c. for billing to customers.

Unit 104 Identify plants

Level 1	50 GLH	6 credits
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Rationale

This unit is concerned with the identification of plants, using common and botanic names, sufficient to enable learners to be aware of the variety of plants available and in use in the horticultural industry.

Plants to be identified will include representatives from the following major groups:

- Trees
- Shrubs
- Hardy herbaceous perennials
- Annuals

Each group should include at least FIFTEEN representatives.

Outcomes

There are two outcomes to this unit. The learner will be able to:

1. identify woody plants, their uses and characteristics
2. identify herbaceous plants, their uses and characteristics

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
104	Identify plants	CU 6	CU 61.		a , i

Unit 104

Outcome 1: Identify woody plants, their uses and characteristics

Practical activities

The learner will be able to:

1. identify common trees
2. identify common shrubs

Underpinning knowledge

The learner will be able to:

1. state that plants can be identified by:
 - a. common names
 - b. botanic namesand give advantages and disadvantages of each method of naming
2. list typical characteristics of trees, to include size, height and nature of stem
3. name a minimum of 15 common trees appropriate to the local area (native and/or exotic)
4. give values of trees for garden use, to include height, stature and habitat
5. list typical characteristics of shrubs, to include size, shape and nature of stem
6. name a minimum of 15 common shrubs appropriate to the local area (native and/or exotic)
7. give values of shrubs for garden and landscape use, to include flowers, fragrance, stature and habitat.

Outcome 2: Identify herbaceous plants, their uses and characteristics

Practical activities

The learner will be able to:

1. identify hardy herbaceous perennials
2. identify hardy and half-hardy annuals

Underpinning knowledge

The learner will be able to:

1. list typical characteristics of hardy perennials, to include need for occasional division, dying-back to perennial rootstock/bulb, need for support during the growing season.
2. name a minimum of 15 common hardy perennials appropriate to the local area
3. list the values of hardy perennials to gardens, to include seasonal interest, flowers, fragrance and foliage interest.
4. list typical characteristics of annual plants, to include need for annual/twice yearly replanting, routine need for resowing.
5. state that hardy annuals may be sown directly into the flowering site in spring, whereas half-hardy annuals are usually sown in a protected environment before transplanting to the flowering site after frost risk has passed.
6. state that many plants grown as annuals are not, botanically, annuals
7. name a minimum of 15 common annual plants appropriate to the local area
8. give values of annuals in gardens, to include seasonal interest, bedding out, colour and fragrance
9. state that some plants may be harmful when handled and give examples of safe handling and use of plants.

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Unit 105 Identify common pests and diseases

Level 1	50 GLH	6 credits
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Rationale

This unit enables learners to recognise a healthy plant, also to identify the common pests and diseases that can affect plants. The learner will know to whom the occurrence of pests or disease should be reported.

Outcomes

There are two outcomes to this unit. The learner will be able to:

1. identify common pests and procedures for dealing with pest damage
2. identify common diseases and disorders and procedures for dealing with them

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
105	Identify common pests and diseases	CU 70	CU 70.1	1-3	d-f
		CU 70	CU 70.2	1, 4	c, e

Unit 105

Outcome 1: Identify common pests and procedures for dealing with pest damage

Practical Activities

The learner will be able to:

1. identify common pests, or symptoms of pest damage
2. record findings

Underpinning knowledge

The learner will be able to:

1. list common pests, to include representatives from the following groups:
 - a. slugs/snails
 - b. mites
 - c. caterpillars
 - d. aphids
 - e. other insects
 - f. rodents/birds
2. give examples of the damage caused by pests, to include:
 - a. reduced quality
 - b. reduced vigour
 - c. poor growth
 - d. poor appearance
3. know to whom findings should be reported:
 - a. supervisor/manager
 - b. tutor/assessor
4. identify that pest control should not be carried out unless clearly instructed by an appropriate person
5. state the importance of completing records of infestations

Outcome 2: Identify common diseases and disorders and procedures for dealing with them

Practical Activities

The learner will be able to:

1. identify common diseases and disorders, or symptoms of disease/disorder
2. record findings

Underpinning knowledge

The learner will be able to:

1. list common plant diseases, to include representatives from the following groups:
 - a. powdery mildew
 - b. grey mould
 - c. damping off
 - d. rust
2. give examples of the damage caused by the disease, to include reduced vigour and poor appearance
3. list common disorders, to include:
 - a. wilting due to water shortage
 - b. scorch due to frost
 - c. scorch due to other causes
4. give examples of the damage caused by disorders, to include:
 - a. growth checks
 - b. poor appearance
5. name the person to whom findings should be reported:
 - a. supervisor/manager
 - b. tutor/assessor
6. state the importance of completing records of diseases and disorders
7. state that control of diseases/disorders should not be carried out unless clearly instructed by an appropriate person

Unit 106 Use transport and assist with maintenance of tools and equipment

Level 1	50 GLH	6 credits
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Rationale

Land-based industries use a wide range of tools, equipment and transport physical resources in the workplace. Health and safety and effective use are important elements of this unit. This unit is planned to be delivered using any land-based situation.

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Outcomes

There are four outcomes to this unit. The learner will be able to:

1. load and unload physical resources in the workplace
2. transport physical resources in the workplace
3. prepare equipment for maintenance
4. maintain tools and equipment

Practical activity 2 – operate transportation equipment effectively

You are advised to note that learners should use suitable equipment to their age and experience, e.g. use of a simple hand-operated barrow for learners below the age of 16. Tasks should only be carried out under supervision of the tutor/assessor. All equipment should be used safely and within the requirements of health and safety legislation.

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
106	Use transport and assist with maintenance of tools and equipment	CU 1	CU 1.1	1-9	a-h
		CU 8	CU 8.1	1-5	a-e & h-j
		CU 17	CU 17.1	1-4	a-d
		CU 17	CU 17.2	1-6	a-i

Unit 106

Outcome 1: Load and unload physical resources in the workplace

Practical activities

The learner will be able to:

1. assist with loading physical resources
2. assist with unloading physical resources.

Underpinning knowledge

The learner will be able to:

1. identify resources which need to be transported
2. state different methods of transportation
3. identify the risks involved in loading materials to include:
 - a. safe lifting and lifting equipment
 - b. securing the load
 - c. protection from damage
4. list labelling requirements
5. state legislative requirements, including the role of health and safety
6. state how to position materials for safe transport.

Outcome 2: Transport physical resources in the workplace

Practical activities

The learner will be able to:

1. assist with transporting physical resources
2. operate transportation equipment safely

Underpinning knowledge

The learner will be able to:

1. list possible effects of transport on product quality
2. state correct methods of operating transportation equipment
3. name the limitations and health and safety legislation applied to equipment in use
4. state the importance of operating transportation equipment safely.

Outcome 3: Prepare equipment for maintenance

Practical activities

The learner will be able to:

1. assist with preparing equipment for maintenance
2. identify appropriate PPE

Underpinning knowledge

The learner will be able to:

1. list equipment and maintenance requirements
2. list PPE and demonstrate an understanding of why it should be worn
3. state specific responsibilities under health and safety legislation
4. list the consequences of:
 - a. poorly maintained equipment
 - b. failure to prevent environmental damage
5. state the importance of maintaining safe, clean and tidy work areas.

Outcome 4: Maintain tools and equipment

Practical activities

The learner will be able to:

1. assist with maintenance procedures
2. clean and store tools correctly after use
3. dispose of waste safely

Underpinning knowledge

The learner will be able to:

1. state the reasons for maintenance of equipment
2. state specific responsibilities under health and safety legislation relating to the maintenance of equipment
3. demonstrate an understanding of how to clean and store tools
4. state the ways of minimising environmental damage during work activities.

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Unit 107 Contribute to the establishment of plants

Level 1	50 GLH	6 credits
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Rationale

This unit introduces learners to the cultivation of sites for horticultural purposes, and to the establishment of plants in outdoor sites. The principles of soil cultivation and plant establishment are also outlined to provide a basic understanding of the activities involved.

Outcomes

There are three outcomes to this unit. The learner will be able to:

1. prepare land by hand cultivation methods
2. plant woody plants
3. plant non-woody plants

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
107	Contribute to the establishment of plants	CU 61	CU 61.1	1-11	c-i
		CU 61	CU 61.2	1-2, 4-5	e
		CU 62	CU 62.2		a, c

Unit 107

Outcome 1: Prepare land by hand cultivation methods

Practical activities

The learner will be able to:

1. cultivate land by single digging
2. prepare a basic tilth

Underpinning knowledge

The learner will be able to:

1. list the basic characteristics of light, medium and heavy soils:
 - a. light soils are best prepared shortly before needed
 - b. heavy soils benefit from exposure to winter weather to improve their structure
 - c. most soils benefit from the addition of organic matter
2. state that single digging is an effective cultivation method for preparing sites for planting or sowing
3. state that mechanical cultivations, such as rotary cultivation, are an alternative to digging
4. state that following digging or rotavating, a site should be raked out and firmed before planting
5. state why the correct tilth, level and consolidation are important
6. identify soil/weather conditions which are not appropriate for cultivations:
 - a. frozen
 - b. snow
 - c. waterlogged
7. identify examples of perennial and annual weeds
8. state that perennial weeds should be removed and that annual weeds can be dug in
9. list the basic health and safety precautions required for hand cultivation of sites by digging, raking and treading.

Outcome 2: Plant woody plants

Practical activities

The learner will be able to:

1. plant container-grown shrubs
2. plant bare-root transplants
3. provide immediate (post-planting) aftercare

Underpinning knowledge

The learner will be able to:

1. list the common categories of plants to include trees and shrubs
2. identify the meaning of the terms evergreen and deciduous
3. identify why it is important that plants are protected from drying out before planting, and that this can be achieved by watering, misting and/or covering with protective sheets
4. state that deciduous plants are best established during the dormant season if transplanted bare-root
5. state that container-grown hardy trees and shrubs can be planted at any time if soil and weather conditions are suitable
6. state that frost, snow, waterlogged and extreme drought conditions are unsuitable ground/weather conditions for planting
7. state that when planting:
 - a. holes should be large enough to accommodate the roots/rootball without difficulty
 - b. damaged roots/shoots should be pruned away before planting
 - c. suitable organic matter can be used to improve the backfill medium
 - d. plants should be positioned correctly as related to viewpoint or line
 - e. planting depth should be correct and how to recognise correct depth
 - f. consolidation is important and that correct heeling-in can achieve this
8. state that the use of mulch, support and protection against severe weather can assist establishment of new plants
9. list the basic health and safety considerations involved in planting trees and shrubs.

Outcome 3: Plant non-woody plants

Practical activities

The learner will be able to:

1. plant bedding plants
2. plant herbaceous perennials
3. provide immediate aftercare

Underpinning knowledge

The learner will be able to:

1. list the common categories of plants, to include: herbaceous perennials, annuals, biennials, bulbs (including corms and tubers)
2. identify the meaning of the terms hardy, half-hardy and tender
3. state why plants must be adequately watered prior to planting
4. name what other preparation may be required prior to or at planting:
 - a. remove dead leaves
 - b. remove dead flowers
 - c. remove any damaged roots/shoots
5. state that bare-root herbaceous perennials should in most cases be planted in autumn or early spring
6. state that summer bedding plants should be planted after the likely last frost date
7. state that when planting:
 - a. holes should be large enough to accommodate plant roots/rootball without difficulty
 - b. planting depth should be correct and how to recognise this
 - c. plants should be planted in the correct position according to line and viewpoint
 - d. consolidation is important to plant success and how to achieve this
8. state the importance of watering in of summer bedding plants and spring planted perennials especially, and how to achieve this
9. list the basic health and safety considerations involved in planting perennials and bedding plants.

Unit 108 Contribute to the maintenance of plants

Level 1	50 GLH	6 credits
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Rationale

This unit introduces learners to the practices involved in the maintenance of plants in amenity and decorative settings, with particular emphasis on the routine tasks of border maintenance and general pruning for health rather than especially as applied to species.

Outcomes

There are two outcomes to this unit. The learner will be able to:

1. maintain the health of plants
2. carry out maintenance of established planted areas

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
108	Contribute to the maintenance of plants	CU 62	CU 62.1	2 & 5	d, f and g
		CH 62	CH 62.2	1, 2 & 5	a-f

Unit 108

Outcome 1: Maintain the health of plants

Practical activities

The learner will be able to:

1. apply fertiliser to established borders
2. apply mulch to established borders
3. apply water to established borders

Underpinning knowledge

The learner will be able to:

1. list examples of ill-health in plants, to include:
 - a. wilting due to lack of water
 - b. poor growth due to nutrient deficiencies
 - c. symptoms caused by physical damage
 - d. problems caused by pests and diseases
2. state that a growing medium containing an adequate balance of air and water is required for most plants
3. state that soils can easily become compacted during wet conditions and the effects this can have on plant growth
4. state that most plants require adequate supplies of the major nutrients nitrogen, phosphorus and potassium for satisfactory growth
5. identify that nitrogen, phosphorus and potassium are usually listed as the N:P:K content of fertilisers
6. state that fertilisers:
 - a. may supply one or more of the major nutrients
 - b. may be applied as granules, powders or liquids
 - c. if granular, are easy to handle and apply
 - d. if liquid, are rapidly available to plants
7. state that accurate application rates are important and the reasons for this
8. state that organic matter:
 - a. in the form of e.g. farm-yard manure or compost, is also a useful source of nutrients
 - b. may be incorporated or applied as a surface mulch
 - c. benefits the soil organism activity
 - d. when used as a mulch is also useful to control weeds and retain moisture
9. state that established planted areas may need irrigation during the period from May to September
10. state that irrigation is most effective if undertaken in cool conditions
11. state that irrigation should be sufficient for water to penetrate at least 20 cm into the soil, but should avoid run-off
12. list the basic health and safety considerations which apply to assisting with plant maintenance.

Outcome 2: Carry out maintenance of established planted areas

Practical activities

The learner will be able to:

1. trim hedges
2. carry out surface cultivation of established borders

Underpinning knowledge

The learner will be able to:

1. identify that some plants benefit from routine pruning to maintain vigour and quality
2. state that plants such as herbaceous perennials are usually cut back to ground during the dormant period to maintain their appearance and health
3. state that herbaceous borders may need to be supported in the spring
4. state that removal of dead flower heads improves the appearance of plants and may prolong their flowering period
5. state that weeds are usually removed from planted areas due to competition with the selected plants and the unattractive appearance created
6. state that weeds may be annual, biennial or perennial
7. identify that chickweed, annual meadow-grass, groundsel and goosegrass are common annual weeds and are usually controlled by hoeing or mulching
8. identify that dandelion, couchgrass and bindweed are common perennial weeds and usually controlled by digging out or weedkillers
9. identify that surface cultivation of established borders may improve the appearance and growth, but if carried out incorrectly can cause damage to plants and soil
10. state that formal hedges are maintained by trimming one or more times each year
11. state that secateurs, shears or mechanical hedge trimmers may be used
12. state that hedge trimming is potentially hazardous, especially for tall hedges
13. identify the basic health and safety considerations involved with the maintenance of planted areas.

Unit 109 Contribute to the propagation of plants

Level 1	50 GLH	6 credits
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Rationale

This unit introduces learners to the principles and practices of vegetative and seed propagation techniques, together with the basic knowledge that is applicable to them. Propagation is in protected and outdoor contexts.

Outcomes

There are three outcomes to this unit. The learner will be able to:

1. prepare propagating mediums
2. sow seeds
3. assist with vegetative propagation

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
109	Contribute to the propagation of plants	CU 63	CU 63.1	1,4 & 7	e, f & i
		CU 63	CU 63.2	2 & 5	d-h
		CU 63	CU 63.3	4-7	b, c, & f-h
		CU 64	CU 64.1	2	b & c
		CU 64	CU 64.2	3-5	b-e

Unit 109

Outcome 1: Prepare propagating mediums

Practical activities

The learner will be able to:

1. carry out a simple pH test

Underpinning knowledge

The learner will be able to:

1. state that these requirements of a propagating medium include:
 - a. suitable structure to ensure aeration and drainage
 - b. suitable pH
 - c. adequate nutrition
2. state that adequate nutrition can be provided by improved soils, alternatives to soil or entirely artificial media
3. state that soil can be improved by
 - a. cultivation
 - b. addition of bulky ingredients such as sand, grit and organic matter
4. list peat, composted bark and coir as acceptable propagation mediums either alone or in combination
5. state that lime is used to adjust the pH of soil or other mediums
6. state that small amounts of nutrients are added to propagating mediums
7. state that measurements of bulky and concentrated ingredients must be accurate to ensure consistency of response
8. state that ingredients can be mixed by hand or mechanically but that a consistent mix is required whichever method is used
9. demonstrate an understanding of the importance of hygiene in the preparation of propagating mediums
10. list the basic health and safety precautions involved in preparing mediums.

Outcome 2: Sow seeds

Practical activities

The learner will be able to:

1. sow seeds into containers
2. sow seeds into drills outdoors
3. provide immediate aftercare

Underpinning knowledge

The learner will be able to:

1. state that seeds:
 - a. require adequate moisture, air and temperature to germinate
 - b. must also be viable
 - c. should be handled carefully to avoid unnecessary physical damage
 - d. must be sown at the correct depth to ensure germination
 - e. should be spaced accurately to ensure that seed is not wasted and seedlings have adequate space to grow
 - f. can be sown broadcast or in drills
2. state that the growing medium may need to be consolidated to ensure correct structure after sowing
3. state that the first stage of the germination process is for the seed to swell by taking in water
4. state that water should be provided carefully to avoid damage to soil/medium structure and to avoid washing away seed
5. state that drilled or broadcast sown seeds should be accurately labelled with the variety and date of sowing
6. state that some seeds:
 - a. may require to be sown in the dark for optimum germination
 - b. once sown may need to be protected from pests and diseases
7. name mice and damping-off as common problems encountered by sown seeds
8. state that seeds and young seedlings should be monitored regularly to ensure that they do not dry out
9. state that purchased seed may be treated with fungicide or other chemicals

Outcome 3: Assist with vegetative propagation

Practical activities

The learner will be able to:

1. propagate plants by stem cuttings
2. propagate plants by division
3. provide immediate aftercare

Underpinning knowledge

The learner will be able to:

1. state that vegetative propagation is used to ensure that new plants are true-to-type
2. name stem cuttings and division as common methods of vegetative propagation
3. state that division:
 - a. usually requires that a section of plant is removed complete with both roots and shoot
 - b. is used to propagate many herbaceous perennial plants and grasses
 - c. for most subjects, is undertaken when the plant is nearly dormant
 - d. requires that plants should be handled carefully to avoid unnecessary damage
 - e. if carried out correctly and at the correct time, is an extremely reliable method of propagation
4. state that stem cuttings:
 - a. are used for propagating many shrubs, perennials and trees
 - b. may be taken using a short tip or section of stem depending on the plant and season of year
 - c. taken when hardy plants are dormant are known as hardwood stem cuttings
 - d. taken of young, actively growing stems are called soft stem cuttings
 - e. taken when the stem has begun to harden are known as semi-ripe cuttings
5. state that for most stem cuttings, the base of the cutting should be trimmed below a node/leaf joint
6. identify suitable lengths for soft, semi-ripe and hardwood cuttings of common plant types
7. state that the cuttings must be placed in a suitable environment to root and that the environment should provide suitable temperature and moisture
8. state the importance of hygiene in propagation by cuttings
9. state that stem cuttings may take from a few days to several months to root
10. list the basic health and safety precautions involved in using knives and secateurs.

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Unit 110 Contribute to the establishment and maintenance of lawns

Level 1	50 GLH	6 credits
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Rationale

This unit introduces learners to the activities involved in preparing sites for lawn turf and turf laying; it also covers mowing, edging and general maintenance of ornamental lawns. In addition the principles beneath the establishment and maintenance activities are outlined.

Outcomes

There are three outcomes to this unit. The learner will be able to:

1. Prepare ground to receive turf
2. establish lawns by laying turf
3. contribute to lawn maintenance

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
110	Contribute to the establishment and maintenance of lawns	CU 15	CU 15.1	1-10	a-e, g-h

Unit 110

Outcome 1: Prepare ground to receive turf

Practical activities

The learner will be able to:

1. complete final consolidation of the site
2. complete final tilth preparation

Underpinning knowledge

The learner will be able to:

1. state that soil conditions for site preparation should not be excessively wet, dry or frozen
2. state that perennial weeds should be removed from the site before or during final preparation
3. state that sites should be prepared to the required level for turfing by raking out and firming/consolidating
4. state that raking out can be done manually or using pedestrian-operated or tractor-mounted equipment
5. state that landscape rakes are ideal for manually preparing sites
6. state that the surface:
 - a. should be raked to the required level before firming
 - b. should be even and free from large stones/debris
 - c. should be consolidated by treading, or by use of rollers on large sites
 - d. must be uniformly consolidated to prevent future uneven settlement
7. state that fertilisers and lime may need to be added to the site before turf laying
8. list the basic health and safety precautions applicable to site preparation activities.

Outcome 2: Establish lawns by laying turf

Practical activities

The learner will be able to:

1. lay turf
2. provide immediate aftercare for lain turf

Underpinning knowledge

The learner will be able to:

1. state that:
 - a. meadow and cultivated turf are commonly used for establishing grassed areas
 - b. meadow turf is inexpensive but may contain weeds, pests, diseases and undesirable grasses
 - c. cultivated turf is usually of reliable quality but more expensive
 - d. cultivated turf is available for a range of grass surfaces
2. state the requirements of supplied turf:
 - a. should be checked for condition prior to use
 - b. damage occurs if allowed to dry out
 - c. yellow/pale grass indicates that turf has been kept rolled up after lifting and that this harms the turf
 - d. turf is best kept by unrolling and being watered unless storage is for less than two days before use
3. state the typical method of turf laying:
 - a. in most situations, grassed areas are established by laying turf at the edges first and then infilling
 - b. laying the turf by 'brick-bonding' helps the area to establish well
 - c. effective butting-up and consolidation
 - d. working from boards during laying
 - e. establishment is improved by brushing in top dressing after laying
4. state that if conditions are dry, turf should be watered effectively until established
5. state that the laid turf should, if possible, be protected from animals and excessive use until established
6. list the basic health and safety precautions that apply to establishing turfed areas.

Outcome 3: Contribute to lawn maintenance

Practical activities

The learner will be able to:

1. mow lawns using pedestrian-operated rotary mowers
2. mow lawns using pedestrian-operated cylinder mowers
3. edge lawns using manual equipment
4. recognise common lawn weeds
5. repair areas of damaged lawn

Underpinning knowledge

The learner will be able to:

1. state that the most important lawn maintenance task is mowing, and that:
 - a. correct mowing has several good effects, including keeping the surface even, reducing weeds and maintaining dense grass growth
 - b. grass should be mown at an appropriate height, which should usually be lower in the growing season than during the winter
 - c. ornamental lawns are usually mown at 12-20mm height in summer
 - d. utility lawns are usually mown at 20-30mm height in summer
 - e. the height of cut in winter is usually raised by 1/3 over the summer height
 - f. grass should be cut when it is no more than 30% over the desired height
2. state that mowers suitable for lawns are rotary and cylinder, and that:
 - a. rotary mowers are easy to use in most situations and conditions, including on slopes and when the grass is damp
 - b. rotary mowers are not suitable for the finest lawns as they do not leave as clean a finish
 - c. cylinder mowers cut with a scissor action, and if correctly set leave a very clean finish
 - d. both types of mowers, if fitted with a rear roller, can leave an attractive striped finish to the lawn
 - e. professional mowers are usually powered by two- or four-stroke petrol engines
3. list basic precautions when dealing with petrol-engine mowers (including removing the plug lead before undertaking any adjustments, refuelling over hard standing to prevent lawn damage if spills occur and not smoking when refuelling)
4. state that grass clippings are usually removed from fine ornamental lawns by 'boxing-off'
5. state that clippings may be 'let fly' on utility lawns.

6. give the basic effects of boxing off or letting clippings fly
7. state that following mowing, lawns are usually edged off to leave an attractive finish, and that edging shears or petrol-engine machines can be used for the purpose
8. state that an edging iron is used to re-cut an uneven edge
9. list other lawn maintenance tasks to include feeding, watering, aeration, scarification and top dressing
10. identify common lawn weeds and the damage that they can cause:
 - a. dandelion
 - b. daisy
 - c. clover
 - d. plantain
 - e. cats ear
 - f. speedwell.

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Unit 111 Contribute to the construction and maintenance of structures and surfaces

Level 1	50 GLH	6 credits
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Rationale

This unit introduces learners to the fundamental skills required to assist in construction and maintenance tasks as they apply commonly in horticulture. Garden fences and hard surfacing are included, in both construction and maintenance activities.

Outcomes

There are three outcomes to this unit. The learner will be able to:

1. contribute to the construction of fences
2. maintain wood surfaces and structures
3. contribute to the construction and maintenance of paths

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
111	Contribute to the construction of maintenance of structures and surfaces	CU 16	CU 16.1	1-10	a-m

Outcome 1: Contribute to the construction of fences

Practical activities

The learner will be able to:

1. excavate post holes for fence posts
2. prepare mixes of concrete
3. assist with the erection of post and panel fences

Underpinning knowledge

The learner will be able to:

1. state that fences have several functions, including privacy, boundary marking, background and security in gardens
2. list a range of types of fences suitable for gardens, including post and rail and post and panel
3. state that panel fences are close-boarded, overlapped or interwoven
4. state that suitable posts for garden fences are of timber or concrete, and that:
 - a. concrete posts are strong and maintenance free
 - b. timber posts require treating with preservative to increase their useful life, and for most purposes are usually pressure treated before use
 - c. fence-posts must be positioned accurately for line, distance apart, height and vertical line
5. state that posts can be secured by being 'driven' in, but that garden fences are usually concreted in place or fixed into metal sockets
6. give suitable dimensions for post holes for concreted posts
7. state that concrete is a mixture of coarse aggregate, sand, cement and water, and that:
 - a. for fence posts, a dry or semi-dry mix can be used
 - b. the concrete must be thoroughly tamped into place to avoid settlement and remove air from the mix, and how this can be achieved
 - c. concrete may need to be protected from frost or heavy rain until fully hardened, and how this can be achieved
8. state that the post should be checked throughout placement for line, height/depth and vertical line/angle, and how this can be achieved
9. state that fence panels are positioned progressively as the fence is erected, working to a taut line.

10. state that panel fence erection is best undertaken as a team activity due to the dimensions and weight of the materials involved
11. state that fence panels are fixed in place by a range of methods including slotting in, panel hangers and nails/screws
12. state that fence posts are usually capped on completion to protect against rotting of the end-grain
13. state that fence panels are treated with preservative to extend the useful life of the timber
14. list the basic health and safety precautions involved in fence erection, with particular reference to safe lifting and handling and personal protective equipment.

Outcome 2: Maintain wood surfaces and structures

Practical activities

The learner will be able to:

1. clean and prepare wood surfaces for maintenance
2. apply surface protection

Underpinning knowledge

The learner will be able to:

1. list timber features in gardens including sheds, fences and garden furniture
2. state that these require routine maintenance to retain their appearance and prolong their useful function, and that the frequency of required maintenance will depend on a range of factors including site and weather conditions
3. state that lichen, moss and fungal rots all impair the appearance and function of timber structures
4. state that these problems are combated by cleaning the timber thoroughly before applying fresh protective covering
5. state that wire or stiff brushes can be used to remove surface dirt, debris and lichen etc, and the conditions when this should be undertaken
6. state that planed surfaces may also need to be re-sanded before protection is applied
7. name surface protection materials to include paint and water-based materials, and give examples of when each may be appropriate
8. state that, for most fences and garden structures etc, water-based preservatives are most appropriate as they are safe in use and also relatively harmless to plants, pets and wildlife
9. state that water-based preservatives are applied using brushes or rollers, or may be sprayed on
10. state that suitable personal protective equipment should be used during application of preservative
11. list the basic health and safety precautions that are involved in maintenance of timber features in gardens, including use of preservatives and potential harm from spores and timber dust.

Outcome 3: Contribute to the construction and maintenance of paths

Practical activities

The learner will be able to:

1. lay paving slabs to a pre-determined level
2. lay gravel or other loose surface paths
3. maintain paths by sweeping, cleaning/clearing and weed control

Underpinning knowledge

The learner will be able to:

1. state that in gardens, paths are used to provide a suitable surface for walking or various forms of vehicle traffic such as wheelbarrows
2. state that the path should be sufficiently strong so as to be suitable for the type of use intended
3. state that some paths can be positioned without need for any foundation, and give examples of when this can be appropriate
4. state that in most cases, to ensure a permanent and even surface, a foundation is installed beneath the path surface
5. give suitable depths, dimensions and materials for foundations for garden paths and patios for pedestrian use (concrete slabs and loose gravel/bark surfaces only)
6. state that the final surface level of the path should shed water effectively to avoid ponding and potential problems with ice in winter
7. list hard-surface paths to include natural stone, concrete slabs and block paving made from concrete or clay
8. state that the surface must be laid to the required level, firm and without projections that may cause trip hazards, and how this can be achieved for concrete slab surfaces
9. state that on completion, the surface of the path may need to be pointed, and how this can be achieved by brushing in dry mortar mix
10. state the importance of cleaning the finished path surface effectively after completion
11. state that the path may need to be kept free from use for a short period until 'set' in place
12. name loose surface paths, such as gravel/bark, as useful in informal gardens and where the safety of children is important
13. state that a geo-textile membrane is usually positioned beneath the final surface to prevent weeds and separate the underlying soil from mixing with the surface
14. state that paths need to be maintained to keep the surface clean, weed-free and safe, and how this can be achieved
15. state that, for hard surfaces, special cleaning products and pressure washing may be required to ensure that the surface is cleaned thoroughly and left in a safe condition
16. list the basic health and safety precautions involved in path construction and maintenance, in particular relating to safe lifting and handling and the use of cement.

Unit 112 Carry out basic floristry tasks

Level 1	50 GLH	6 credits
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Rationale

This unit enables learners to gain knowledge develop skills in the care and preparation of fresh materials. It also provides the opportunity to assist with displays.

Outcomes

There are four outcomes to this unit. The learner will be able to:

1. follow instructions for checking the delivery of fresh materials
2. follow instructions to unpack and condition fresh materials
3. follow instructions to store and display fresh materials
4. follow instructions to record wastage of fresh materials

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

This unit relates to:

No NOS exist for floristry

Unit 112

Outcome 1: Follow instructions for checking the delivery of fresh materials

Practical activities

The learner will be able to:

1. identify materials listed on a delivery note
2. check qualities and quantities are correct against a delivery note
3. report discrepancies to a supervisor

Underpinning knowledge

The learner will be able to:

1. list the information to be found on a delivery note:
 - a. supplier details and delivery date
 - b. product name and quantity
 - c. item price and bunch price
 - d. shop details and delivery/invoice number
2. list the wholesale quantities for the following materials:
 - a. roses
 - b. chrysanthemums
 - c. freesia
 - d. carnations
 - e. gerbera
3. list signs that would indicate materials are of a poor quality:
 - a. small flower heads/weak stems:
 - b. physical damage
 - c. mature flowers
 - d. discoloured foliage
 - e. diseased/pest infestation
4. describe the importance of promptly reporting discrepancies to the supervisor.

Outcome 2: Follow instructions to unpack and condition fresh materials

Practical activities

The learner will be able to:

1. prepare buckets and equipment
2. unpack fresh materials
3. condition fresh materials with guidance
4. clear work area

Underpinning knowledge

The learner will be able to:

1. list tools and equipment needed to condition fresh materials to include:
 - a. containers
 - b. appropriate feed
 - c. scissors
 - d. secateurs
 - e. knife
2. list the reasons for keeping containers clean and disinfected to include:
 - a. bacteria
 - b. disease
 - c. cross contamination
 - d. promote good health and longevity
3. state how tools and equipment should be maintained to include:
 - a. scissors
 - b. secateurs
 - c. knives
 - d. containers/buckets
4. describe safe handling techniques for the following:
 - a. heavy boxes
 - b. tray of house plants
 - c. buckets of water
 - d. dustbins/waste

5. state the importance of following the correct conditioning methods:
 - a. cutting stems on a slant
 - b. removing foliage below the water line
 - c. identify and remove damage
 - d. de-thorn where necessary
 - e. using clean containers
 - f. using clean water
 - g. using flower food
6. state the importance of returning tools and equipment to store
7. state how the conditioning area should be left
8. list the health and safety precautions to observe when conditioning fresh stock to include:
 - a. use of PPE
 - b. personal safety
 - c. cleanliness
 - d. HASAWA.

Outcome 3: Follow instructions to store and display fresh materials

Practical activities

The learner will be able to:

1. rotate stock
2. store fresh materials until required
3. display fresh materials in the shop/sales area

Underpinning knowledge

The learner will be able to:

1. state the procedure to follow when rotating stock:
 - a. select and remove mature or poor quality stock from display
 - b. sort mature stock and waste and store or discard materials appropriately
 - c. replenish displays with new and existing stock
 - d. place excess new stock in the holding area
 - e. clean and tidy work area
2. state how to set up a display of fresh materials:
 - a. inside a shop
 - b. outside a shop
 - c. pot plants
 - d. cut flowers and foliage
3. state how to maintain a display of fresh materials:
 - a. cut flowers and foliage
 - b. pot plants
 - c. watering
 - d. colour blocking/grouping
 - e. pricing
 - f. labelling.

Outcome 4: Follow instructions to record wastage of fresh materials

Practical activities

The learner will be able to:

1. identify and remove mature, damaged or poor quality fresh materials unfit for sale
2. complete a wastage record

Underpinning knowledge

The learner will be able to:

1. state the features of mature stock:
 - a. blown flowers
 - b. yellow foliage
 - c. wilting
 - d. falling petals
 - e. slimy stems
2. state the features of damaged or poor quality stock:
 - a. missing buds
 - b. broken stems
 - c. bruised flowers or foliage
 - d. buds not opening
3. list information required on a wastage record
 - a. name of product
 - b. quantity
 - c. price
 - d. date.

Unit 113 Identify flowers, foliages and plants

Level 1	50 GLH	6 credits
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Rationale

This unit is concerned with the identification of flowers, foliages and pot plants. It enables the learner to be aware of the variety of materials available to the commercial florist and horticulturalist. Identification can be either written or verbal. Learners should also be encouraged to learn 'Cultivar' or Variety names where appropriate, but these will not be assessed.

Flowers will include: *Narcissus, Tulipa, Iris, Freesia, Dianthus, Rosa, Chrysanthemum, Dahlia, Lilium, Gerbera, Lathyrus, Helianthus.*

Foliages will include: *Xerophyllum tenax, Pittosporum tenuifolium, Galax, Eucalyptus, Asparagus umbellatus, Ruscus, Ilex, Arachnoids adiantiformis, Hedera, Aspidistra, Pinus, Monstera*

Pot Plants will include: *Cyclamen persicum, Rhododendron simsii, Nephrolepis exaltata, Ficus elastica, Saintpaulia ionanthe, Euphorbia pulcherrima, Dieffenbachia, Hyacinth, Begonia, Chlorophytum comosum, Kalanchoe blossfeldiana, Impatiens*

Outcomes

There are two outcomes to this unit. The learner will be able to:

1. identify cut flowers and cut foliages using common names or Genus
2. identify potted plants using common names or Genus

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

This unit relates to:

No NOS exist for floristry

Unit 113

Outcome 1: Identify cut flowers and foliages using common names or Genus

Practical activities

The learner will be able to:

1. identify flowers and when they are available
2. identify foliages for commercial use.

Underpinning knowledge

The learner will be able to:

1. state the common name or genus of twelve flowers from the range
2. state the common name or genus of three seasonal flowers commercially available in:
 - a. spring
 - b. summer
 - c. autumn
3. state the common name or genus of five foliages commercially available throughout the year from the range.

Outcome 2: Identify potted plants using common names or Genus

Practical activities

The learner will be able to:

1. identify flowering pot plants
2. identify foliage pot plants

Underpinning knowledge

The learner will be able to:

1. state the common name or genus of three flowering pot plants from the range
2. state the normal season of availability for 3 flowering and 3 foliage pot plants from the range
3. state the common name or genus of three foliage pot plants from the range.

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Unit 114 Produce and maintain shop displays

Level 1	50 GLH	6 credits
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Rationale

This unit introduces the learner to planning and creating shop displays. The unit also enables learners to develop skills associated with maintaining shop displays.

Outcomes

There are three outcomes to this unit. The learner will be able to:

1. prepare and plan a shop display
2. create a shop display
3. maintain a shop display

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

This unit relates to:

No NOS exist for floristry

Outcome 1: Prepare and plan a shop display

Practical activities

The learner will be able to:

1. sketch and plan the display
2. gather props and accessories
3. prepare area for display

Underpinning knowledge

The learner will be able to:

1. identify a range of occasions suitable for themed shop display:
 - a. valentines day
 - b. mothers day
 - c. Christmas
 - d. Halloween
2. state how the display area should be prepared:
 - a. cleared
 - b. cleaned
3. list checks to be made before displays are positioned:
 - a. cleanliness
 - b. lighting
 - c. safety
4. state the importance of a display plan
5. list the reasons for labelling display goods:
 - a. customer information
 - b. Sale of Goods Act
 - c. Trades Description Act
6. list the factors to consider when constructing displays to include:
 - a. safety
 - b. security
7. state the reasons for keeping displays stocked:
 - a. customer appeal
 - b. optimum sales

Outcome 2: Create a shop display

Practical activities

The learner will be able to:

1. make props
2. install props and bases into the display area
3. position stock in the display
4. price and label sale items

Underpinning knowledge

The learner will be able to:

1. list materials suitable for making display props
2. state safe working practices when assembling the display
3. describe the importance of effective team work
4. list the sundries required to construct the display:
 - a. flower vases
 - b. baskets
 - c. containers
 - d. drapes
 - e. giftware
 - f. add on sales (balloons, sales and teddies)
5. state the importance of effective use of space and materials at different heights
6. list the signage required for the display:
 - a. posters
 - b. fliers
 - c. banners
7. state the reason for clear pricing of goods for sale
8. list methods for pricing goods:
 - a. price tags
 - b. picks
 - c. sticky labels
 - d. blackboard.

Outcome 3: Maintain a shop display

Practical activities

The learner will be able to:

1. check stock levels within the display
2. gather new stock
3. replenish new stock
4. dismantle displays

Underpinning knowledge

The learner will be able to:

1. state the reasons for keeping displays stocked:
 - a. customer appeal
 - b. optimum sales
2. list the problems that may occur in maintaining a display:
 - a. lack of suitable stock to maintain
 - b. lack of time to replenish the display
3. list the points to consider when dismantling a display to include:
 - a. control spread
 - b. return goods to store
 - c. HASAWA

Unit 115 Produce planted designs

Level 1	50 GLH	6 credits
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Rationale

This unit enables learners to gain knowledge and develop skills in the preparation and production of planted designs.

Outcomes

There are two outcomes to this unit. The learner will be able to:

1. prepare to produce planted designs
2. produce planted designs

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

This unit relates to:

No NOS exist for floristry

Outcome 1: Prepare to produce planted designs

Practical activities

The learner will be able to:

1. select tools and equipment
2. prepare containers
3. prepare pot plants

Underpinning knowledge

The learner will be able to:

1. list tools and equipment required to produce a planted design to include:
 - a. hand trowel
 - b. secateurs
 - c. leaf shine
 - d. scissors
2. list a range of containers suitable for planted designs:
 - a. basket
 - b. plastic bowl
 - c. terracotta pot
 - d. ceramic bowl
3. state the importance of drainage for planted designs
4. list various planting mediums to include:
 - a. peat-free compost
 - b. multi-purpose compost
 - c. loam-based compost
5. describe how to prepare plants before planting into containers
6. state points to look for to ensure a plant is healthy before planting up:
 - a. clean leaves
 - b. new growth
 - c. pest and disease free
7. list examples of ill-health in plants, to include:
 - a. wilting due to lack of water
 - b. poor growth due to nutrient deficiencies
 - c. symptoms caused by physical damage
 - d. problems caused by pests and diseases
8. list plants and/or bulbs which are poisonous or can be an irritant.

Outcome 2: Produce planted designs

Practical activities

The learner will be able to:

1. pot up an individual plant or bulb
2. plant up a bowl or basket of mixed flowering and foliage plants

Underpinning knowledge

The learner will be able to:

1. state how to take an individual plant out of a pot
2. list planting methods to include:
 - a. direct planting
 - b. plunging
3. state how plants should be positioned in a bowl to include spacing and depth
4. state the importance of using the correct amount and type of compost
5. state the importance of using drainage materials for planted designs
6. state the importance of moisture for completed designs
7. list a range of decorative finishes for planted designs:
 - a. moss
 - b. pebbles
 - c. bark
8. state checks to be made on completed designs to include:
 - a. security
 - b. cleanliness
 - c. finish
9. list the health and safety points to consider when planting designs to include:
 - a. clear work area
 - b. handling delicate or poisonous materials
 - c. observe HASAWA.

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Unit 116 Assemble basic floral designs

Level 1	50 GLH	6 credits
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Rationale

This unit enables learners to gain knowledge and the practical skills to prepare and construct basic floral designs.

Outcomes

There are two outcomes to this unit. The learner will be able to:

1. prepare and construct basic designs
2. recognise gift wrapping materials and ancillary items

The range of the different types of design must include the following:

Tied:

1. tied posy
2. hostess bouquet
3. tied design for container

Mediums:

1. posy arrangement
2. open wreath
3. line arrangement

Wired:

1. buttonhole
2. corsage
3. circlet

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

This unit relates to:

No NOS exist for floristry

Outcome 1: Prepare and construct basic designs

Practical activities

The learner will be able to:

1. prepare materials for designs
2. assemble materials for designs
3. package designs

Underpinning knowledge

The learner will be able to:

1. state materials required for assembly of tied designs:
 - a. cut flowers
 - b. foliage
 - c. sundries, tools and equipment
 - d. packaging materials if required
2. list the method of assembly for a tied design:
 - a. remove foliage
 - b. place materials in a spiral
 - c. tie securely
 - d. package as necessary
3. list the method of construction for designs in a medium:
 - a. prepare medium (soak)
 - b. prepare materials
 - c. insert materials
 - d. complete design to specification required
4. list the method of construction for a wired design:
 - a. select sundries and fresh materials
 - b. select correct wire gauges for purpose
 - c. wire and tape materials
 - d. construct units
 - e. Assemble and complete design

Outcome 2: Recognise gift wrapping materials and ancillary items

Practical activities

The learner will be able to:

1. identify a range of gift wrapping materials
2. use gift wrapping materials and ancillary items

Underpinning knowledge

The learner will be able to:

1. list materials for gift wrapping to include:
 - a. cellocoup
 - b. craft paper
 - c. tissue paper
2. name materials which can be used to make decorative bows:
 - a. ribbon
 - b. raffia
 - c. hessian
3. list ancillary items which can be added to gift-wrapped designs to include:
 - a. flower food
 - b. care card
 - c. gift card and envelope
 - d. delivery instructions
4. describe the importance of keeping the work area clean and tidy

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
117	Assist with maintaining the health and wellbeing of animals	LP 2	LP 2.2	2 & 6	b, e, g
		CU 1	CU 1.1	1-6	a-f, h, j, k
		CU 1	CU 1.2	1, 2,4, 5	a, b, e, f
		CU 1	CU 1.3	1, 2	a, b, c
		Introduction to Horse Care Unit 105	Introduction to Horse Care Unit 105	1-8	a-e
		CU 29	CU 29.1	1-4, 6, 7, 9	a -b, e-k

Unit 117

Outcome 1: Assess (visually) the physical state of animals

Practical activities

The learner will be able to:

1. identify the visual signs of health in animals
2. identify the visual signs of ill health in animals
3. record the health of animals

Underpinning knowledge

The learner will be able to:

1. list the visual signs of health in animals:
 - a. condition of skin, feathers, scales or coat
 - b. behaviour and posture
 - c. appetite and water intake
 - d. movement
 - e. condition of eyes, ears, nose and mouth
 - f. appearance of urine and faeces
2. list the visual signs of ill health in animals:
 - a. condition of skin, feather, scales or coat
 - b. behaviour and posture
 - c. appetite and water intake
 - d. movement
 - e. condition of eyes, ears, nose and mouth
 - f. appearance of urine and faeces
3. state the procedure to follow if an animal is found to be sick or injured:
 - a. reporting and recording
 - b. monitoring
 - c. isolating
 - d. when to call the vet
4. state the range of signs of stress, or pain that animals may show:
 - a. vocal signs
 - b. visual signs
5. state how to ensure the health safety and wellbeing of both animals and staff when assessing the health of animals
6. state the records kept to help maintain the health of animals:
 - a. age
 - b. type
 - c. diet
 - d. weight
 - e. comments
7. state the signs which may indicate potential problems with an animal's health or wellbeing
8. state how, why and to whom you would report the health status of an animal.

Outcome 2: Administer preventative care to animals

Practical activities

The learner will be able to:

1. administer preventative care to animals
2. check animals for signs of ectoparasites
3. restrain animals for preventative care

Underpinning knowledge

The learner will be able to:

1. state what is meant by preventative care and why it is given
2. state the routes for administering preventative care:
 - a. orally
 - b. topically
 - c. by injection
 - d. nasal
3. state how to ensure the safety of the animal and self when assisting with the administering of preventative treatments
4. state the importance of following:
 - a. instructions both verbal and written
 - b. accurate recording
 - c. accurate dosing
5. state the importance of checking all equipment prior to use:
 - a. PPE
 - b. restraining or handling equipment
 - c. administering equipment
6. state the procedure for reporting damaged or faulty equipment
7. state how and why waste should be disposed of correctly:
 - a. sharps
 - b. medications
 - c. organic
 - d. inorganic
8. state the visual signs of ectoparasites in animals
9. state why it is important to monitor animals following preventative care being administered.

Unit 118 Assist with the care of animals

Unit 117.3

Outcome 3: Deal with a range of potential animal emergency situations

Practical activities

The learner will be able to:

1. assist in an animal emergency situation
2. identify the visual signs of an animal emergency
3. identify and report potential hazards
4. identify the correct location of safety equipment

Underpinning knowledge

The learner will be able to:

1. state the procedure for the following situations:
 - a. a fire
 - b. an escaped animal
 - c. an injured or sick animal
2. state how to ensure the safety of self when dealing with an injured animal
3. list the visual signs of potential animal emergencies (as applicable to species):
 - a. bleeding
 - b. not breathing or difficulty breathing
 - c. choking
 - d. fitting
 - e. unconscious
 - f. change in behaviour or temperament
 - g. severe lameness
4. state what is meant by first aid
5. state the importance of following set first aid emergency procedures:
 - a. getting help
 - b. ensuring own safety
6. state the procedure to follow if you find potential hazards or damaged equipment
7. state the location of emergency equipment:
 - a. fire extinguishers
 - b. accident book
 - c. animal first aid box
 - d. human first aid box
 - e. restraining equipment
8. identify potential hazards:
 - a. faulty or broken equipment
 - b. damaged or faulty housing
 - c. electrical hazards

Level 1	50 GLH	6 credits
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Rationale

Correct care of animals is important for a range of reasons including animal welfare, health, environmental and economic factors. This unit covers feeding, reproduction and harvesting of products. These will be taught through the medium of the chosen species. Codes of practice for chosen species should be included. This unit covers farmed livestock and is appropriate for the agriculture and environment route.

This unit should cover TWO or more of the following species:

- pigs
- beef
- dairy
- poultry
- sheep

Outcomes

There are three outcomes to this unit. The learner will be able to:

1. provide food and water
2. identify requirements for reproduction
3. collect marketable animal products to meet production requirements

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
118	Assist with the care of animals	LP 2	LP 2.1	1	a, d
		LP 2	LP 2.2	4	
		CU 1	CU 1.1	1-7	a-f, h, i,
		CU 1	CU 1.2	1-2, 4	a-b, e-f
		CU 1	CU 1.3	1-2	a – c
		HC 101	HC 101.1	1-7	a-i
		CU 29	CU 29.2	1-6	a-g

Outcome 1: Provide food and water

Practical activities

The learner will be able to:

1. feed animals according to instructions
2. supply water to animals
3. identify normal and abnormal feeding habits
4. dispose of waste

Underpinning knowledge

The learner will be able to:

1. state the effects of improper feeding, to include:
 - a. health and hygiene
 - b. economics
 - c. animal performance
 - d. welfare and codes of practice
2. state typical feeding systems and quantities for two named animal species
3. identify the role of health and safety legislation in feeding procedures
4. state normal feeding behaviour and list actions that may be taken if abnormal behaviour is observed
5. state the role of water in the animal's diet and the effects of shortages
6. identify the effects of improper waste disposal.

Outcome 2: Identify requirements for reproduction

Practical activities

The learner will be able to:

1. identify signs of heat and act on information
2. assist with mating procedures
3. assist with the care of mother and offspring

Underpinning knowledge

The learner will be able to:

1. state typical signs of heat in a named species
2. state the procedures for assisting with the mating of a named species of animal
3. state the requirements under animal welfare and health and safety
4. state the checks to be made to mother and offspring post birthing process.

Outcome 3: Collect marketable animal products to meet production requirements

Practical activities

The learner will be able to:

1. assist with collection of marketable (saleable) animal products
2. identify factors affecting the quality of animal products

Underpinning knowledge

The learner will be able to:

1. state the animal welfare and health and safety requirements
2. list the care and maintenance of equipment used which could include:
 - a. handling and weighing equipment
 - b. milking equipment
 - c. shearing and clipping equipment
3. state a typical routine that could be used to select/collect animal products
4. state the problems and their causes that may occur during the selection/collection procedures and likely actions to take
5. state common standards of quality requirements for named production system
6. list the effects of selecting/collecting marketable products that fail to meet production standards

Unit 119 Assist with the movement, handling and accommodation of animals

Level 1	50 GLH	6 credits
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Rationale

Animal movement, restraint and handling are key elements of working with animals. Correct techniques ensure that the welfare of animals and the health and safety of the individual are maintained. This unit will cover a range of techniques and equipment and can be tailored to specific species and/or systems.

For learners following the animal care route, this unit should cover TWO or more of the following groups:

- rabbits and guinea pigs
- other rodents
- dogs and cats
- fish
- exotics
- birds

For learners following the horse care route, this unit should cover:
Equines (could include donkeys)

For learners taking the agriculture and environmental conservation route, this unit should cover TWO or more of the following species:

- pigs
- poultry
- beef
- dairy
- sheep

Outcomes

There are three outcomes to this unit. The learner will be able to:

1. move animals
2. handle and restrain animals
3. clean and maintain animal accommodation

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding

119	Assist with the movement, handling and accommodation of animals	AC 1	AC 1.1	1-4	a-h
		AC 1	AC 1.2	1-5	a-f
		CU 30	CU 30.1	1-6	a-g
		CU 30	CU 30.2	1-5	a-e
		CU 31	CU 31.1	1-7	a-g
		CU 31	CU 31.2	1-8	a-k
		LP 1	LP 1.1	1-8	a-g
		LP 1	LP 1.2	1-7	a-h
		Unit 102	Unit 102.1	1- 7	a-i
		Unit 104	Unit 104.2	1-6	a, c, d, e, f, g

Unit 119

Outcome 1: Move animals

Practical activities

The learner will be able to:

1. assist with moving animals from one place to another
2. assist with the transport of animals

Underpinning knowledge

The learner will be able to:

1. state how to approach animals and move to new areas safely and properly
2. state why it is important to handle animals correctly during movement and transportation
3. list the effects of poor handling
4. state examples of possible problems and action to take including the role of communication
5. list the checks to be made on the transport vehicle to include:
 - a. cleanliness
 - b. security
 - c. animal welfare
 - d. hazards
 - e. animal ID and movement records
6. state the relevant animal welfare legislation applied to loading and unloading animals.

Outcome 2: Handle and restrain animals

Practical activities

The learner will be able to:

1. handle and restrain animals correctly and safely

Underpinning knowledge

The learner will be able to:

1. give examples of why it may be necessary to restrain an animal
2. name the different systems of animal identification and state why it is important to correctly identify animals being handled
3. state how to handle and restrain animals correctly
4. give examples of stress conditions/symptoms which may occur during handling and restraint and state how these can be minimised
5. list possible risks to the operator when handling animals
6. give examples of methods of reporting problems during animal handling
7. list the procedures when using named restraining equipment to maintain the safety and well being of the animal and operator.

Outcome 3: Clean and maintain animal accommodation

Practical activities

The learner will be able to:

1. clean accommodation according to instructions
2. prepare accommodation to appropriate standards required by instructions

Underpinning knowledge

The learner will be able to:

1. list equipment and materials needed for cleaning specified accommodation
2. state the animal welfare requirements and how to promote their health and wellbeing
3. state how to dispose of organic and inorganic waste
4. list responsibilities under animal welfare and health and safety legislation
5. list possible hazards in accommodation and appropriate action to take
6. name appropriate bedding material for a named situation and list the possible effects of using incorrect type and/or amounts of bedding
7. state when and how to use a disinfectant
8. state when and how to use a cleaning agent

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Unit 120 Introduction to crop systems

Level 1	50 GLH	6 credits
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Rationale

Agriculture encompasses a range of enterprises with both livestock and arable farms involved in the production of different crops involving various techniques. This unit provides an introduction into chosen cropping systems

Outcomes

There are three outcomes to this unit. The learner will be able to:

1. identify soil types and perform simple soil tests
2. identify a range of crops, common weeds and crop diseases
3. produce crop calendars for named crops

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
120	Introduction to crop systems	CU 62	CU 62.1	2-3 & 5	a-f & i-j
		CU 62	CU 62.2	1-3 & 5-7	a-g & j

Unit 120

Outcome 1: Identify soil types and perform simple soil tests

Practical activities

The learner will be able to:

1. identify different soil types (i.e. light, medium or heavy soils)
2. carry out simple soil tests, including pH

Underpinning knowledge

The learner will be able to:

1. list the basic characteristics of light, medium and heavy soils, and state that:
 - a. light soils are best prepared shortly before needed
 - b. heavy soils benefit from exposure to winter weather to improve their structure
 - c. most soils benefit from the addition of organic matter
2. state the basic tilth requirements for sowing most agricultural crops
3. state the mechanical cultivations that are commonly used to achieve a basic tilth for sowing most agricultural crops
4. state why the correct tilth, level and consolidation are important
5. state that certain soil/weather conditions are not appropriate for cultivations:
 - a. frozen
 - b. snow
 - c. waterlogged
6. list the basic health and safety precautions required for mechanical cultivation of land for sowing with agricultural crops.

Outcome 2: Identify a range of crops, common weeds and crop diseases

Practical activities

The learner will be able to:

1. identify a range of crops, from:
 - a. vegetative growth
 - b. seed heads
 - c. seeds
2. identify common weeds for a selected crop
3. identify the common diseases of a selected crop

Underpinning knowledge

The learner will be able to:

1. list the harmful effects of weeds and disease
2. describe briefly two different control measures for weeds or diseases

Outcome 3: Produce crop calendars for named crops

Practical activities

The learner will be able to:

1. produce a basic crop calendar showing key husbandry features
2. assist with harvesting and storage checks necessary to maintain product quality

Underpinning knowledge

The learner will be able to:

1. state crop production cycles for named crops, to include:
 - a. seedbed preparation
 - b. planting
 - c. fertiliser
 - d. weed control
 - e. disease control
 - f. harvesting and storage
2. state the factors effecting product quality during storage.

Unit 121 Assist with the repair and maintenance of structures in the countryside

Level 1	50 GLH	6 credits
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Rationale

This unit introduces the learner to the practical activities involved in the maintenance and repair of boundary fences and access points. It also encourages learners to consider the implications for wildlife of the tasks they are undertaking.

Outcomes

There are two outcomes to this unit. The learner will be able to:

1. repair and maintain a stock-proof fence
2. repair and maintain a gate or stile

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
121	Assist with the repair and maintenance of structures in the countryside	CU 8	CU 8.1	1-5	a-e & h-j
		CU 8	CU 8.2	1-4	a-d
		CU 16	CU 16.1	1-10	a-m
		LP 2	LP 2.1	2-3	b+c+g

Unit 121

Outcome 1: Repair and maintain a stock-proof fence

Practical activities

The learner will be able to:

1. assist with the repair of a stock-proof fence
2. assist with the maintenance of a stock-proof fence
3. select, transport and use tools and equipment safely

Underpinning knowledge

The learner will be able to:

1. list and describe the different types of fencing:
 - a. post and rail
 - b. post and wire - stock, rabbit or deer proof
 - c. barbed wire
2. list the types of tools and equipment used for repairing a stock-proof fence
3. list the types of tools and equipment needed to maintain a stock-proof fence
4. state the common types of wear and damage associated with the tools and equipment
5. state the appropriate procedures for dealing with damaged equipment:
 - a. ensure equipment is put where it will not be used
 - b. report damage to the appropriate person
 - c. ensure tool store reporting procedure is carried out
8. list the potential safety hazards associated with transporting tools and equipment:
 - a. manual transportation
 - b. vehicular transportation
7. state the correct safety equipment and clothing that should be worn/used when carrying out repair and maintenance work
8. state how tools and equipment should be used safely to ensure the safety of the user and others
9. state how tools should be used to avoid damage during use
10. state the correct methods for manual lifting of heavy or bulky items
11. state why fences need to be repaired and maintained:
 - a. for safety
 - b. to prevent stock roaming
 - c. to prevent damage to vegetation
12. recognise when fences need to be repaired and maintained
13. describe the correct way to carry out repairs to a fence:
 - a. replacing a broken rail
 - b. replacing damaged wire
14. describe briefly the correct way to carry out different maintenance operations:
 - a. rubbing down/preparation
 - b. painting
15. state how to handle and dispose of waste safely:
 - a. treated timber: handle with gloves and remove from site

- b. wire and other metal (nails, staples etc): remove from site and dispose of according to company policy
 - c. hazardous waste e.g. timber preservative: to be returned to store or to a designated waste site
16. list the effects that the repair and maintenance work might have on wildlife:
- a. excluding wildlife from an area
 - b. disturbance during the task
 - c. the effects of hazardous substances or waste left on the site
17. state how to clean and store tools after use.

Outcome 2: Repair and maintain a gate or stile

Practical activities

The learner will be able to:

1. assist with the repair of a gate or stile
2. assist with the maintenance of a gate or stile

Underpinning knowledge

1. state the different types of access point:
 - a. hanging gate
 - b. kissing gate
 - c. ladder stile
 - d. step-over stile
 - e. squeeze stile
2. state the tools and equipment needed to repair a gate or stile
3. state the tools and equipment needed to maintain a gate or stile
4. state the correct safety equipment and clothing that should be used when carrying out repair and maintenance work
5. recognise when gates and stiles need to be repaired or maintained:
 - a. faulty hinges
 - b. damaged/unsound rails and steps
 - c. faulty fastenings
 - d. damaged/unsound posts
6. list the problems caused by faulty or broken gates and stiles:
 - a. preventing access
 - b. causing accidents and/or injury
 - c. allowing stock to escape
7. describe briefly the routine maintenance of gates and stiles to include:
 - a. checks for damaged/unsound parts
 - b. treatment with preservatives
 - c. ensuring steps are secure
 - d. ensuring gates are swinging freely
 - e. ensuring latches and fastenings are in good order and secure
 - f. ensuring weighted devices e.g. dog gates are working smoothly
8. describe briefly the correct way to carry out repairs to a gate including temporary fencing to keep stock secure
9. describe briefly the correct way to carry out repairs to a stile including temporary fencing to keep stock secure.

10. state how to handle and dispose of waste safely:
 - a. treated timber: handle with gloves and remove from site
 - b. wire and other metal (nails, staples etc): remove from site and dispose of according to company policy
 - c. hazardous waste, e.g. timber preservative: to be returned to store or to a designated waste site
11. state the effects on wildlife that the repair and maintenance work might have:
 - a. disturbance during the task
 - b. the effects of hazardous substances or waste left on site.

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Unit 122 Assist with the repair and maintenance of surfaces and ancillary structures in the countryside

Level 1	50 GLH	6 credits
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Rationale

This unit introduces the learner to the practical activities involved in the maintenance and repair of surfaces, such as footpaths and bridleways, and ancillary structures, such as seats, notice boards, simple bridges and steps. The learner is encouraged to work keeping the safety of themselves and others in mind, minimising the risk of damage to tools and equipment and also to recognise the effects of their work upon the local wildlife

Outcomes

There are two outcomes to this unit. The learner will be able to:

1. repair and maintain access routes
2. repair and maintain ancillary structures

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
122	Assist with the repair and maintenance of surfaces and ancillary structures in the countryside	CU 8	CU 8.1	1-5	a-j
		CU 8	CU 8.2	1-4	a-d
		CU 16	CU 16.1	1-10	a-i & k-m

Unit 122

Outcome 1: Repair and maintain access routes

Practical activities

The learner will be able to:

1. assist with the repair of an access route
2. assist with the maintenance of an access route
3. select, transport and use tools and equipment safely

Underpinning knowledge

The learner will be able to:

1. list and describe the different types of surfaces for footpaths and bridleways:
 - a. bark chippings
 - b. gravel or stone chippings (loose or compacted)
 - c. asphalt
 - d. grass
2. list the types of tools and equipment used for maintaining and repairing access routes
3. state the common types of wear and damage associated with the tools and equipment
4. state the appropriate procedures for dealing with damaged equipment:
 - a. ensure equipment is put where it will not be used
 - b. report damage to the appropriate person
 - c. ensure tool store reporting procedure is carried out
5. list the potential safety hazards associated with transporting tools and equipment:
 - a. manual transportation
 - b. vehicular transportation
6. state the correct safety equipment and clothing that should be worn/used when carrying out repair and maintenance work
7. state how tools and equipment should be used safely and how to avoid damage during use
8. state the correct methods for manual lifting of heavy or bulky items
9. state when and why surfaces need to be repaired and maintained to include:
 - a. for the safety of pedestrians
 - b. to maintain drainage systems
 - c. to prevent erosion of surrounding areas because damaged area is by-passed.

10. state the effects of poor drainage on an access route:
 - a. breakdown of the surface
 - b. rotting of timbers
 - c. by-passing by pedestrians
11. state the correct way to carry out repairs to a surface by replacing or resurfacing with suitable materials
12. name the correct way to carry out different maintenance operations:
 - a. sweeping
 - b. raking
 - c. adding extra surface materials
13. state how to handle and dispose of waste safely:
 - a. treated timber: handle with gloves and remove from site
 - b. wire and other metal (nails, staples etc): remove from site and dispose of according to company policy
 - c. hazardous waste e.g. timber preservative: to be returned to store or to a designated waste site
14. list the effects that the repair and maintenance work might have on wildlife:
 - a. disturbance during the task
 - b. the effects of hazardous substances or waste left on the site
15. state how to clean and store tools after use.

Outcome 2: Repair and maintain ancillary structures

Practical activities

The learner will be able to:

1. assist with the repair of simple bridges and steps
2. assist with the maintenance of ancillary structures, such as seats and sign boards

Underpinning knowledge

The learner will be able to:

1. state where simple bridges (with or without a handrail) might be located:
 - a. to bridge small streams and ditches
 - b. to allow more direct access to an area
 2. state where simple steps might be located:
 - a. to gain access to bridges
 - b. on steep or inaccessible slopes
 - c. where erosion of surrounding areas is being caused by zig-zag walking
 3. list the tools and equipment required to repair a simple bridge or simple steps
 4. state the correct safety equipment and clothing that should be worn when repairing bridges or steps
 5. recognise when bridges or steps are in need of repair:
 - a. damaged/unsound rails and timbers
 - b. damaged/unsound posts
 6. describe the correct way to carry out repairs to a bridge or steps
 7. state how surfaces of steps and bridges can be made safer for pedestrians by:
 - a. ridging the surface material
 - b. attaching a non-slip surface such as chicken wire
 8. state the routine maintenance tasks for structures such as seats or signboards:
 - a. rubbing down/preparation
 - b. painting
 9. state how to handle and dispose of waste safely:
 - a. treated timber: handle with gloves and remove from site
 - b. wire and other metal (nails, staples etc): remove from site and dispose of according to company policy
 - c. hazardous waste, e.g. timber preservative: to be returned to store or to a designated waste site.
- Unit 122.2*
10. state the effects on wildlife that the repair and maintenance work might have:
 - a. disturbance during the task
 - b. the effects of hazardous substances or waste left on site.

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Unit 123 Carry out tractor operations

Level 1	50 GLH	6 credits
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Rationale

This unit is concerned with the procedures for operating a tractor effectively under a range of conditions.

Please be advised that due to legal age restrictions on tractor driving, learners must be aged 17 or over to drive a tractor on a public highway. City & Guilds NPTC advises tutors to consider the suitability of equipment to be used and the age/capability of learners. Tasks should only be carried out under supervision of the tutor/assessor. All equipment should be used safely and within the requirements of health and safety legislation.

Outcomes

There are two outcomes to this unit. The learner will be able to:

1. prepare a tractor and trailer for use
2. operate a tractor and trailer

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
123	Carry out tractor operations	CU 10	CU 10.1	1-7	a-e
		CU 10	CU 10.2	1-8	a-f
		CU 10	CU 10.3	1-5	a-d
		CU 10	CU 10.4	1-6	a-g

Unit 123

Outcome 1: Prepare a tractor and trailer for use

Practical activities

The learner will be able to:

1. carry out pre-start checks and adjustments
2. attach a trailer to the tractor safely and securely
3. carry out work activities in accordance with health and safety procedures

Underpinning knowledge

The learner will be able to:

1. state the pre-start checks to be carried out on the tractor daily before use and the action to take to make it ready for use:
 - a. fuel
 - b. oil
 - c. water
 - d. operators handbook/checklist
 - e. tyre pressure
 - f. cleanliness of windows and mirrors
 - g. lights and beacon are in good working order
 - h. all brakes are working correctly
 - i. correct seat adjustment
2. list current health and safety legislation in relation to the preparation and use of tractors and equipment
3. name the legal restrictions for operating a tractor and trailer

Outcome 2: Operate a tractor and trailer

Practical activities

The learner will be able to:

1. identify the controls and their use
2. carry out manoeuvres of the vehicle and equipment safely and efficiently
3. carry out post operation procedures safely

Underpinning knowledge

The learner will be able to:

1. state the information to be found on the instrument panel and correct settings when the tractor is running normally
2. list example hazards which may be encountered and the action to take
3. list the effects of weather and ground conditions on vehicle operation
4. state how to use the tractor and trailer safely and efficiently
5. state the correct procedure for leaving tractor and trailer in a suitable condition for future use
6. state the action to take in the event of an incident which affects the health and safety of self and others

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Unit 124 Introduction to wildlife and conservation

Level 1	50 GLH	6 credits
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Rationale

This unit provides an introduction to the interactions between plants and animals. It encourages learners to recognise the interdependence of different species and to look for the main characteristics of different types of habitat.

Outcomes

There are two outcomes to this unit. The learner will be able to:

1. recognise a range of habitats
2. recognise the energy links between plants and animals

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

This unit relates to:

There are no NOS for environmental conservation

Outcome 1: Recognise a range of habitats

Practical activities

The learner will be able to:

1. recognise a range of habitats
2. recognise plants and animals common to a given habitat

Underpinning knowledge

The learner will be able to:

1. list the main habitat types:
 - a. woodlands
 - b. grasslands
 - c. freshwater wetlands
 - d. salt-water and coastal habitats
 - e. upland and heathlands
2. state the characteristics of the main woodland types:
 - a. broadleaved
 - b. conifer
 - c. scrub
 - d. coppice
3. list the main freshwater habitats:
 - a. rivers and streams
 - b. lakes and reservoirs
 - c. ponds
 - d. peat bogs and fens
 - e. marshes
4. list types of grassland habitat:
 - a. agricultural (improved) grassland
 - b. unimproved grazed grassland
 - c. traditional hay meadows
 - d. amenity grassland (parks, playing fields, golf courses)
 - e. water or wet lowland meadows
5. state the features of the climate which affect a site:
 - a. amount of rainfall
 - b. exposure to sunshine
 - c. exposure to wind
 - d. exposure to cold
6. list other features which affect what grows on a site:
 - a. soil type
 - b. the level of the water table

7. list the main groups of plants:
 - a. mosses
 - b. ferns
 - c. flowering plants (includes herbaceous plants, shrubs and trees)
 - d. grasses, sedges and rushes
 - e. conifers
8. list the main groups of animals:
 - a. invertebrates
 - b. fish
 - c. amphibians
 - d. reptiles
 - e. birds
 - f. mammals
9. list the types of plants in a given community (habitat)
10. list the types of animals in a given habitat
11. using a simple key or guide list the main plant species in the given habitat (common names only)
12. using a simple key or guide list the main bird and mammal species present in the given habitat.

Outcome 2: Recognise the energy links between plants and animals

Practical activities

The learner will be able to:

1. identify a food chain from a chosen habitat
2. identify a food source and feeding method for animal(s)

Underpinning Knowledge

The learner will be able to:

1. state the meaning of the term 'food chain'
2. state the meaning of the terms 'herbivore', 'carnivore' and 'omnivore'
3. state the meaning of the term 'predator'
4. describe a simple food chain from a given habitat
5. state how plants provide food and energy for grazing and browsing animals
6. state how animals provide food and energy for predators
7. state how predators and other large animals provide a source of nutrients for plants
8. state how material decomposes with the help of invertebrates, fungi and bacteria
9. name three plants which support a wide variety of consumers
10. name a food source and feeding method

Unit 125 Assist with the establishment of plants and sites in the countryside

Level 1	50 GLH	6 credits
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Rationale

This unit introduces learners to the practical activities involved in preparing a site for the establishment of plants, in the actual planting and in ensuring the new plants are afforded some protection. It also encourages learners to be aware of what they are planting and why. Plants may include seeds, seedlings, transplants or nursery stock.

Outcomes

There are two outcomes to this unit. The learner will be able to:

1. Prepare a site for establishing plants
2. Carry out planting and plant protection

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
125	Assist with the establishment of plants and sites in the countryside	CU 8	CU 8.1	1-5	a-j
		CU 8	CU 8.2	1-4	a-c
		CU 61	CU 61	1-2 & 4-11	a-k

Unit 125

Outcome 1: Prepare a site for establishing plants

Practical activities

The learner will be able to:

1. assist with the preparation of a site for planting
2. recognise and protect desirable species of flora and fauna

Underpinning knowledge

The learner will be able to:

1. state the meaning of the term natural regeneration
2. list the preparations that could be made to assist natural regeneration to include:
 - a. removal of alien species
 - b. removal of more dominant species
 - c. lowering/raising of water levels
 - d. fencing to include/exclude animals
 - e. fencing to exclude humans
 - f. changes to crop planting regimes
3. state the ground conditions required for planting the chosen species
4. state how damage to flora and fauna can be minimised during clearance and cultivation:
 - a. identification of desired species
 - b. choosing the correct time of the year
 - c. use of appropriate tools for the task
 - d. use of appropriate work methods
5. name flora and fauna (after identification by a supervisor) which must be preserved
6. list the tools and equipment required for carrying out clearance or cultivation before planting
7. state the common types of wear and damage associated with the tools and equipment
8. state the appropriate procedures for dealing with damaged tools and equipment:
 - a. ensure equipment is put where it will not be used
 - b. report damage to the appropriate person
 - c. ensure tool store reporting procedure is carried out
9. list the correct safety clothing that should be worn during site preparation
10. state how tools and equipment should be used safely to ensure the safety of the user and others
11. state how to clean and store tools and equipment after use.

Outcome 2: Carry out planting and plant protection

Practical activities

The learner will be able to:

1. assist with planting a variety of plants (trees, shrubs, wild flowers)
2. select and use suitable plant protection

Underpinning knowledge

The learner will be able to:

1. list the types of tools and equipment used for planting
2. state the common types of wear and damage associated with the tools and equipment
3. state the appropriate procedures for dealing with damaged equipment:
 - a. ensure equipment is put where it will not be used
 - b. report damage to the appropriate person
 - c. ensure tool store reporting procedure is carried out
4. list the potential safety hazards associated with transporting tools and equipment:
 - a. manual transportation
 - b. vehicular transportation
5. list the correct safety equipment and clothing that should be worn/used when carrying out planting
6. state how tools and equipment should be used safely to ensure safety of user and others
7. state the meaning of the terms native species and local provenance
8. state the meaning of the terms whip, cell grown, bare-rooted, container grown
9. state the meaning of the terms notch planting and pit planting for trees
10. state the meaning of the terms broadcasting seed and plug planting
11. state how to store plants before planting by heeling in or covering to retain moisture and prevent damage by frost
12. state how plants should be spaced to allow maximum growth
13. state how plants can be protected from:
 - a. grazing and trampling animals by fencing, tree guards, spiral guards
 - b. weed growth by mulch matting, general mulch
 - c. wind by staking, tree guards, shelter netting
 - d. exposure by mulching, shelter netting, gro-tubes
14. list the conditions to avoid for planting:
 - a. waterlogged soil
 - b. drought
 - c. prolonged frost.

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Unit 126 Assist with the maintenance of plants and sites in the countryside

Level 1	50 GLH	6 credits
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Rationale

This unit involves learners in the after care of plants including the management of regeneration. It includes the basic management of trees and woodlands as well as herbaceous plants and grassland maintenance

Outcomes

There are two outcomes in this unit. The learner will be able to:

1. maintain plants
2. maintain sites

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
126	Assist with the maintenance of plants and sites in the countryside	CU 8	CU 8.1	1-5	a-j
		CU 8	CU 8.2	1-4	a-d
		CU 62	CU 62.1	1-10	a-g, & i
		CU 62	CU 62.2	1-8	a-i & k-l

Unit 126

Outcome 1: Maintain plants

Practical activities

The learner will be able to:

1. assist with the basic after-care of newly planted sites
2. assist with the management of small trees and woodlands by pruning , thinning and coppicing
3. assist with the disposal of waste

Underpinning knowledge

The learner will be able to:

1. state the importance of moisture to all plants and state how this might be conserved through watering and mulching
2. recognise weed species and state how they can be controlled by:
 - a. hand weeding
 - b. mulching
 - c. cutting or mowing
 - d. the use of herbicides
3. state the signs of unhealthy growth due to:
 - a. pests
 - b. disease
 - c. insufficient or too much water
 - d. physical damage
4. list the tools and equipment required for weeding, mowing, pruning and coppicing
5. state the common types of wear and damage associated with the tools and equipment
6. state the appropriate procedures for dealing with damaged equipment:
 - a. ensure equipment is put where it will not be used
 - b. report damage to the appropriate person
 - c. ensure tool store reporting procedure is carried out
7. list the potential safety hazards associated with transporting tools and equipment:
 - a. manual transportation
 - b. vehicular transportation
8. state the correct safety equipment and clothing that should be worn/used when carrying out maintenance work with plants and trees

9. state how tools and equipment should be used safely and managed on site
10. state how and when trees and shrubs should be pruned to maintain healthy growth
11. state how and why trees should be thinned
12. state the meaning of the term 'coppice'
13. list the methods of disposing of waste materials:
 - a. composting
 - b. spreading on the ground
 - c. stacking in habitat piles
 - d. removing
 - e. burning
 - f. shredding or chipping

Outcome 2: Maintain sites

Practical activities

The learner will be able to:

1. assist in the general maintenance of sites
2. assist with the maintenance of grass by mowing or brush-cutting

Underpinning knowledge

The learner will be able to:

1. state the importance of keeping sites free of waste (litter) and hazardous materials
2. state the safety precautions to be observed when removing waste and hazardous materials:
 - a. always wear gloves
 - b. wear protective clothing appropriate to the task
 - c. leave and report to the supervisor waste that you think might be hazardous
3. state the reasons for managing grassland by mowing or brush-cutting:
 - a. to allow access
 - b. to allow desired species to flourish
 - c. to control unwanted species
 - d. to create a variety of habitats
4. state why grass mowing should take place at certain times of the year to
 - a. allow easy public access
 - b. allow spring flowers to bloom and set seed
 - c. allow summer flowers to bloom and set seed
 - d. allow the food plants of certain species to flourish
 - e. prevent invasive species taking over
5. state when it would be appropriate to use a mower and when a brush-cutter:
 - a. even-ness/steepness of the ground
 - b. type of vegetation to be cut
 - c. required finish to the surface
 - d. amount of space available
6. state the correct clothing and safety equipment that should be worn/used when carrying out mowing or brush-cutting
7. state the correct procedures for starting, using and stopping the cutting machinery to maintain the safety of self and others
8. state the correct method of disposal for waste materials:
 - a. composting
 - b. mulching
 - c. burning
 - d. removal from the site

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Unit 127 Animals in the wild and in society

Level 1	50 GLH	6 credits
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Rationale

This unit enables learners to increase their knowledge about the species of animals and how people and animals interact.

Outcomes

There are two outcomes to this unit. The learner will be able to:

1. identify the main features of animals in the wild
2. identify animal and people relationships

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

This unit relates to:

No NOS related to this unit.

Unit 127

Outcome 1: Identify the main features of animals in the wild

Practical activities

The learner will be able to:

1. classify a range of animals
2. identify key characteristics of named groups of animals

Underpinning knowledge

The learner will be able to:

1. define the terms that can be applied to an animal:
 - a. herbivore
 - b. carnivore
 - c. omnivore
 - d. insectivore
 - e. nocturnal
 - f. diurnal
 - g. warm blooded
 - h. cold blooded
 - i. live young bearing
 - j. egg bearing
2. list THREE animals that belong in each of the following categories:
 - a. herbivore
 - b. carnivore
 - c. omnivore
 - d. insectivore
 - e. nocturnal
 - f. diurnal
 - g. warm blooded
 - h. cold blooded
 - i. live young bearing
 - j. egg bearing
3. give the main types of food and feeding habits of:
 - a. deer (herbivore)
 - b. buzzard (carnivore)
 - c. otter (carnivore)
 - d. hedgehog (insectivore)
4. give the main behavioural habits and physical adaptations of a named animal in the following categories:
 - a. nocturnal
 - b. diurnal
 - c. warm blooded
 - d. cold blooded

5. state the gestation period and method of reproduction in the following animals:
- a. whales
 - b. sea horses
 - c. wallabies
 - d. penguins
 - e. crocodiles
 - f. sharks
 - g. frogs

Outcome 2: Identify animal and people relationships

Practical activities

The learner will be able to:

1. identify responsible pet ownership
2. present facts about a named domestic pet

Underpinning knowledge

The learner will be able to:

1. state the considerations that pet owners should take when choosing a pet:
 - a. personal preference
 - b. cost of feeding and maintaining
 - c. exercise requirements
 - d. size of accommodation required
 - e. time to spend with pet
 - f. safety of home and garden
 - g. age of family
2. describe the reasons why people keep pets:
 - a. companionship
 - b. therapy
 - c. working animals
 - d. assistance animals
 - e. leisure
 - f. social reasons
 - g. security
 - h. breeding or business
3. demonstrate an awareness of the roles and responsibilities of a named organisation from the following types of animal-related establishments:
 - a. breed society
 - b. rescue centre
 - c. assistance animals
4. identify a range of jobs within the animal care industry:
 - a. kennel/cattery
 - b. welfare/rescue
 - c. retail
 - d. zoo/wildlife establishment
 - e. regulatory e.g. dog warden/customs
 - f. veterinary care
 - g. education.

Unit 128 Assist with feeding and watering animals

Level 1	50 GLH	6 credits
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Rationale

This unit covers the basic requirements and principles for a learner to feed and water animals and to clean and maintain the equipment used to do this. Learners should be familiar with using various watering and feeding systems. Learners should have access to be able to feed individuals or groups of animals.

For learners following the animal care route, this unit should cover TWO or more of the following groups of animals:

- rabbits and guinea pigs
- other rodents
- dogs and cats
- fish
- exotics
- birds

For learners following the horse care route, this unit should cover:
Equines (could include donkeys)

Outcomes

There are three outcomes to this unit. The learner will be able to:

1. select and maintain suitable equipment for watering animals
2. select and maintain suitable equipment for feeding animals
3. prepare and present food and water to animals

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
128	Assist with feeding and watering animals	CU29	CU29.2	1-6	a-f
		AC2	AC2.2	1-8	a-f
		Intro to Horse Care Unit 101	Intro to Horse Care Unit 101	1-8	a-i
		LP2	LP2.1	1	a, d
		LP2	LP2.2	4	d
		CU1	CU1.1	1-7	a-f, h, i,

		CU1	CU1.2	1, 2, 4,	a, b, e, f
		CU13	CU1.3	1, 2	a, b, c

Unit 128

Outcome 1: Select and maintain suitable equipment for watering animals

Practical activities

The learner will be able to:

1. select the correct equipment for watering individuals or groups of animals
2. check watering equipment for cleanliness, operation and suitability for the species

Underpinning knowledge

The learner will be able to:

1. recognise why animals require water
2. state the importance of checking all equipment prior to it being used
3. state the importance of checking watering equipment is in working order and how to do this on (as appropriate to species):
 - a. automatic watering systems
 - b. dropper bottles
 - c. bowls or containers
4. state the procedure to follow if equipment is found to be damaged or faulty
5. name the different watering systems suitable for animals (as appropriate to species):
 - a. automatic watering
 - b. dropper bottle
 - c. bowls or containers
6. state how to maintain and clean different watering systems (as appropriate to species):
 - a. automatic watering systems
 - b. dropper bottles
 - c. bowls or containers
7. state how to use different watering systems (as appropriate to species):
 - a. automatic watering systems:
 - b. dropper bottles
 - c. bowls or containers
8. state when and how often water should be offered to animals
9. state the reasons why water should be regularly replaced
10. state the importance of hygiene in maintaining equipment

Outcome 2: Select and maintain suitable equipment for feeding animals

Practical activities

The learner will be able to:

1. select the correct equipment for feeding individuals or groups of animals
2. select and maintain feeding equipment for cleanliness, operation and suitability for the species

Underpinning knowledge

The learner will be able to:

1. recognise why animals require food
2. state the checks to feeding equipment prior to it being used
3. state the procedure to follow if equipment is found to be damaged or faulty
4. name different feeding systems suitable for animals (as appropriate to species):
 - a. automatic
 - b. scatter
 - c. container
 - d. demand feeding
 - e. other
5. list how to maintain and clean feeding systems and equipment (as appropriate to species):
 - a. automatic
 - b. scatter
 - c. container
 - d. demand feeding
 - e. other
6. state how to use different feeding systems suitable for animals (as appropriate to species):
 - a. automatic
 - b. scatter
 - c. container
 - d. demand feeding
 - e. other
7. state when and how food should be offered to animals
8. state why it is important to ensure health and safety and the importance of hygiene in maintaining equipment

Outcome 3: Prepare and present food and water to animals

Practical activities

The learner will be able to:

1. weigh and measure food and water
2. present food and water in the correct manner to a named species
3. wash and store all equipment used and dispose of waste

Underpinning knowledge

The learner will be able to:

1. state the different ways of finding out if and when an animal needs feeding or watering:
 - a. verbal instruction
 - b. written instruction
2. state why it is important to:
 - a. follow instructions
 - b. keep records
 - c. report any relevant information
3. state how to find out what type of food should be fed to individuals or groups
4. list the ways used to find out how much should be fed to individuals or groups
5. state how to find out how much water should be given to individuals or groups
6. state the importance of selecting, preparing and presenting the correct diet for individuals or groups
7. state the importance of preparing the correct amount of diet for individuals or groups
8. state how and where to store excess diet
9. state the ways of disposing of any waste from feeding safely and correctly
10. state the procedure for reporting any variations in normal feeding and watering habits
11. list the correct equipment needed to prepare diets for animals and how to use it safely
12. state the checks to be made on the food prior to preparing it
13. state what signs can occur if animals are:
 - a. underfed
 - b. overfed
 - c. given the wrong food
14. state how to maintain the health and safety of the animals and self during the work.

Unit 129 Assist with the preparation and maintenance of animal accommodation

Level 1	50 GLH	6 credits
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Rationale

This unit covers the basic requirements and principles for a learner to select, prepare and maintain animal accommodation. Learners should have access to selecting, preparing and maintaining accommodation to individuals or groups of animals.

For learners taking the animal care route, this unit should cover TWO or more of the following groups of animals:

- rabbits and guinea pigs
- other rodents
- dogs and cats
- fish
- exotics
- birds

For learners taking the horse care route, this unit should cover:
Equines (could include donkeys)

Outcomes

There are four outcomes to this unit. The learner will be able to:

1. select suitable housing, fixtures and fittings for individuals or groups of animals
2. prepare accommodation for individuals and groups of animals
3. clean out and maintain accommodation for individuals or groups of animals
4. dispose of waste from cleaning out or maintaining accommodation for individuals or groups of animals

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
129	Assist with the preparation and maintenance of animal accommodation	CU 30	CU 30.1	1-6	a-g
		CU 30	CU 30.2	1-5	a-e
		LP 1	LP 1.1	1-8	a- h
		LP 1	LP 1.2	1-7	a-h
		Introduction	Introduction	1- 7	a-i

		to Horse Care Unit 102.1	to Horse Care Unit 102.1		
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Unit 129

Outcome 1: Select suitable housing, fixtures and fittings for individuals or groups of animals

Practical activities

The learner will be able to:

1. identify correct equipment for individuals or groups of animals
2. identify correct fixtures and fittings for individuals or groups of animals

Underpinning knowledge

The learner will be able to:

1. state why it is important to check all equipment prior to it being used and how this is done
2. name different types of animal accommodation available and give advantages and disadvantages for individuals or groups of animals
3. list a range of fixtures and fittings required in accommodation for individuals or groups of animals
4. state why the range of fixtures and fittings are suitable for individuals or groups of animals
5. state the procedure to follow if equipment is found to be damaged or faulty
6. state the checks to be made on fixtures and fittings prior to putting them in with individuals or groups of animals.

Outcome 2: Prepare accommodation for individuals and groups of animals

Practical activities

The learner will be able to:

1. check accommodation for health and safety of a new animal
2. select accommodation, bedding/substrate for individuals or groups of animals
3. prepare accommodation for individuals or groups of animals

Underpinning knowledge

The learner will be able to:

1. state basic housing for animals with regards to:
 - a. temperature
 - b. light
 - c. ventilation
 - d. structure
2. state why it is important to ensure health and safety with regards to the animal(s) and to yourself and others whilst preparing the accommodation
3. list the advantages and disadvantages of different bedding/substrate material
4. list the types of accommodation available and give advantages and disadvantages of these for individuals or groups of animals
5. list the equipment needed to clean out and prepare a new enclosure:
 - a. cleaning equipment
 - b. safety equipment and PPE
 - c. cleaning agents
6. state the procedure to follow if equipment is found to be damaged or faulty
7. state the checks to be made on accommodation prior to putting the animal(s) in it.

Outcome 3: Clean out and maintain accommodation for individuals or groups of animals

Practical activities

The learner will be able to:

1. select cleaning equipment and cleaning agent
2. prepare and use cleaning agent with regards health and safety
3. clean animal accommodation following instructions from supervisor
4. check animal accommodation before returning animal(s) and complete records

Underpinning knowledge

The learner will be able to:

1. list the cleaning agents used to prepare, clean and maintain accommodation and the protective equipment you need when using them
2. state the importance of following manufacturer's guidelines when using cleaning agents
3. state why it is important to:
 - a. follow instructions
 - b. keep records
 - c. report any relevant information
4. state the ways you could find out if an animal needs to be cleaned out:
 - a. verbal
 - b. written
5. state the importance of selecting, and using the correct cleaning equipment when cleaning and maintaining accommodation
6. state the checks you would make on accommodation prior to putting the animal(s) back in it
7. state how you would ensure the health, safety and welfare of both yourself and the animal(s) whilst cleaning is in progress
8. state why it is important to use the correct cleaning routine and why it is important that accommodation is cleaned out
9. state the procedure to follow for reporting incidents or accidents or if equipment is found to be damaged or faulty.

Outcome 4: Dispose of waste from cleaning out or maintaining accommodation for individuals or groups of animals

Practical activities

The learner will be able to:

1. identify waste disposal methods
2. dispose of waste
3. leave the workplace and equipment clean and tidy

Underpinning knowledge

The learner will be able to:

1. name the different types of waste from cleaning out and maintaining individuals or groups of animals
2. state the methods for disposing of different types of waste from cleaning out for individuals or groups of animals:
 - a. organic
 - b. inorganic
 - c. hazardous
 - d. non hazardous
3. list the PPE that should be used when handling waste from cleaning out for individuals or groups of animals
4. state how you would ensure the health, safety and welfare of both yourself and the animal when disposing of waste
5. state how you should lift safely
6. state why it is important to leave the work area and equipment clean and tidy
7. state the importance of selecting and using the correct equipment to dispose of waste from individuals or groups of animals
8. list the different methods of cleaning equipment and why this is important
9. state the procedure to follow if equipment is found to be damaged or faulty
10. state the checks you would make on equipment to ensure it is functional and safe to use.

Unit 130 Assist with the handling and restraint of animals

Level 1	50 GLH	6 credits
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Rationale

Most animals will require handling and restraining at some stage in their life. This unit covers how to assist a supervisor when handling, moving and restraining an animal.

For learners following the animal care route, this unit should cover TWO or more of the following groups of animals:

- rabbits and guinea pigs
- other rodents
- dogs and cats
- fish
- exotics
- birds

For learners following the horse care route, this unit should cover:
Equines (could include donkeys)

Outcomes

There are three outcomes to this unit. The learner will be able to:

1. identify the temperament of a named animal species
2. identify handling and restraint equipment
3. demonstrate correct methods of handling and restraint

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
130	Unit 130 Assist with the handling and restraint of animals		AC1.1		a, b, d, e, g, h
			AC1.2	1 - 5	a - f
			CU31	2 - 3, 5 - 7	a, b, d - g
		Introduction to Horse Care Unit 103.1	Introduction to Horse Care Unit 103.1	1- 4	a - c, f, g
		Introduction to Horse	Introduction to Horse Care	3 - 5	a, c - f

		Care Unit 104.1	Unit 104.1		
		Introduction to Horse Care Unit 106.1	Introduction to Horse Care Unit 106.1	4, 6	a
		Introduction to Horse Care Unit 106.2	Introduction to Horse Care Unit 106.2 A	1, 5	c, d
		CU 29	CU 29.1	2, 3	a, b, g, k

Unit 130

Outcome 1: Identify the temperament of a named animal species

Practical activities

The learner will be able to:

1. assess behaviour of animals through their body language
2. identify normal behaviour for a species
3. use animal records to identify signs of stress

Underpinning knowledge

The learner will be able to:

1. list the main facial expressions and body postures used by animals to indicate their emotional state:
 - a. submissive
 - b. aggressive
 - c. frightened
 - d. protective
 - e. dominant
2. state the normal behaviour in a natural habitat:
 - a. solitary or pack
 - b. maternal and paternal behaviour
 - c. play and exercise
 - d. feeding
3. state normal behaviour in captivity:
 - a. solitary or pack
 - b. maternal and paternal behaviour
 - c. play and exercise
 - d. feeding
4. list signs of abnormal behaviour in captivity:
 - a. illness
 - b. boredom activities
 - c. territorial
5. list signs of stress:
 - a. appetite
 - b. behaviour
 - c. faeces
 - d. body posture

6. state how an animal's behaviour may change with its environment:
 - a. in a pack
 - b. in its natural habitat
 - c. in captivity
 - d. with its mother
 - e. temperature of accommodation/season
 - f. transportation
 - g. time of year
7. list the use of animal records:
 - a. communication
 - b. for billing to customers
 - c. accurate record of animal's activities, behaviour, medication, feeding, water and health
8. state the need for vaccination against tetanus:
 - a. animal bites
 - b. abrasions caused by rusty materials and/or soil

Outcome 2: Identify handling and restraint equipment

Practical activities

The learner will be able to:

1. select handling and restraining equipment
2. check that handling and restraint equipment is suitable and safe for use

Underpinning knowledge

The learner will be able to:

1. list the equipment used for handling and restraint (as appropriate to species):
 - a. halter
 - b. bridle
 - c. collars and leads
 - d. boxes
 - e. nets
 - f. gloves
 - g. halti
 - h. harness
 - i. cages
 - j. crush cage
 - k. muzzles
 - l. graspers
 - m. twitch
2. list the protective equipment required when handling and restraining:
 - a. gloves
 - b. shoes/boots with protective toe caps
 - c. goggles
 - d. shield
 - e. face mask
 - f. hat
3. state how to check that equipment is safe and suitable for use:
 - a. condition of equipment
 - b. size of equipment in relation to size of animal
 - c. recommended equipment to species of animal
 - d. consult animal records
4. list the health and safety implications of handling animals:
 - a. PPE
 - b. zoonotic diseases
 - c. washing hands thoroughly
 - d. security of animal
 - e. tetanus
 - f. what to do when an animal shows aggression

Outcome 3: Demonstrate correct methods of handling and restraint

Practical activities

The learner will be able to:

1. show how to use and fit restraining equipment safely
2. restrain a named species for either grooming or health check

Underpinning knowledge

The learner will be able to:

1. state the correct methods for fitting and use of restraint equipment (as appropriate to species):
 - a. halter
 - b. bridle
 - c. collars and leads
 - d. boxes
 - e. nets
 - f. gloves
 - g. halti
 - h. harness
 - i. cages
 - j. crush cage
 - k. muzzles
 - l. graspers
 - m. twitch
2. state how to approach an animal prior to handling and restraint:
 - a. quietly
 - b. slowly
 - c. plan with team (if appropriate)
 - d. reassuring
3. state when animals require restraint:
 - a. grooming
 - b. veterinary attention
 - c. transportation
 - d. mating
 - e. to apply medication
 - f. to complete hygiene procedures
 - g. to complete a health check
4. list health and safety hazards:
 - a. faulty equipment
 - b. injury to animal
 - c. injury to handler
 - d. security of animal
 - e. zoonoses

Unit 131 Assist with the exercise of animals

Level 1	50 GLH	6 credits
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Rationale

This unit covers how to assist a supervisor when exercising an animal.

For learners following the animal care route, this unit should cover TWO or more of the following groups of animals:

- rabbits and guinea pigs
- other rodents
- dogs and cats
- fish
- exotics
- birds

For learners taking the horse care route, this unit should cover:
Equines (could include donkeys)

Outcomes

There are two outcomes to this unit. The learner will be able to:

1. select exercise equipment and area for health and safety
2. use correct equipment to exercise an animal

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
131	Assist with exercise of animals	AC 1	AC 1.1	1, 2, 5	a - e, g, h
		AC 1	AC 1.2	1-4	a - f
		CU 31	CU 31	1-7	a-f
		Introduction to Horse Care Unit 103.1	Introduction to Horse Care Unit 103.1	1-7	a, c, f, g
		Introduction to Horse Care Unit 104.1	Introduction to Horse Care Unit 104.1	1-5	a, d, e, f

		Introduction to Horse Care Unit 106.1	Introduction to Horse Care Unit 106.1	4, 6	b, d
		Introduction to Horse Care Unit 106.2	Introduction to Horse Care Unit 106.2	3-5	c - e
		CU 29	CU 29.1	1-3, 8	a, c, e, g, k

Unit 131

Outcome 1: Select exercise equipment and area for health and safety

Practical activities

Under supervision the learner will be able to:

1. identify types of exercise and equipment for a named animal
2. check and maintain exercise equipment and area

Underpinning knowledge

The learner will be able to:

1. list the need for exercise:
 - a. to promote health
 - b. to prevent boredom
2. list when an animal's exercise requirement may vary:
 - a. age
 - b. pregnancy
 - c. obesity
 - d. illness
 - e. preparation for work/competition/display
3. list the types exercise that animals can take:
 - a. controlled
 - b. free range – animal exercises itself
4. state exercise equipment that can be used (as appropriate to species):
 - a. lunge
 - b. walkers
 - c. collars and leads
 - d. reins
 - e. harness
 - f. wheels (rodents)
 - g. gauntlet
5. list types of exercise areas (as appropriate to species):
 - a. runs
 - b. paddocks
 - c. cages
 - d. flying areas
6. list potential hazards and maintenance required for exercise areas:
 - a. doors and gates
 - b. fencing
 - c. cleaning procedures
 - d. uneven surfaces
 - e. litter
7. state how to record and monitor exercise on to a record chart.

Outcome 2: Use correct equipment to exercise an animal

Practical activities

The learner will be able to:

1. demonstrate correct usage and fit of equipment for a named animal
2. exercise a named animal (to include aftercare of the animal)
3. monitor and record exercise activity

Underpinning knowledge

The learner will be able to:

1. name the equipment used for exercising and check it for maintenance and safety (as appropriate to species):
 - a. lunge
 - b. walkers
 - c. collars and leads
 - d. reins
 - e. harness
 - f. wheels (rodents)
 - g. gauntlet
2. state how to fit equipment
3. state how to prepare an animal for exercise:
 - a. check animal record
 - b. approach to the animal
 - c. groom and health check (if required)
 - d. put on correct exercise equipment
4. recognise normal behaviour of an animal:
 - a. body posture
 - b. facial expressions
 - c. vocal signals
5. recognise abnormal behaviour of an animal:
 - a. submissive
 - b. aggressive
 - c. protective
 - d. dominant
 - e. illness
6. state how much exercise a healthy animal requires
7. state how to record an exercise activity
8. list signs of good health:
 - a. condition of coat, eyes, ears, skin, feathers, mucous membrane
 - b. behaviour
 - c. appetite and water intake
 - d. healthy faeces and urine
9. list the necessary after care:

- a. grooming
- b. health check
- c. water and feed

Unit 132 Assist with the preparation for exercise and aftercare of horses

Level 1	50 GLH	6 credits
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Rationale

This unit involves the general daily care and hygiene of stable kept horses which includes the care of materials used for bedding horses. This unit also covers assisting with grooming horses, putting on and removing horse clothing, putting on and removing tack and cleaning tack.

Outcomes

There are five outcomes to this unit. The learner will be able to:

1. maintain bedding in a stable
2. groom horses
3. put on and remove horse clothing
4. tack up and un-tack horses
5. clean tack

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
132	Assist with the preparation for exercise and aftercare of horses	Horse care Unit 102.1	Horse care Unit 102.1	1-7	a-c, e-g
		Horse care Unit 102.2	Horse care Unit 102.2	1	d
		Horse care Unit 103.1	Horse care Unit 103.1	1-4 & 6,7	d-f
		Horse care Unit 103.2	Horse care Unit 103.2	1, 2, 5,	d
		Horse	Horse care	1, 2, 4,	b, e-g, Able to

		care Unit 103.3	Unit 103.3		do:- h
		Horse care Unit 107.1	Horse care Unit 107.1	1, 4, 8,	c, d, f, g,

Unit 132

Outcome 1: Maintain bedding in a stable

Practical activities

The learner will be able to:

1. muck out and bed down in order to maintain a clean stable environment
2. maintain bedding for the stable kept horse

Underpinning knowledge

The learner will be able to:

1. state reasons for providing bedding:
 - a. warmth
 - b. comfort
 - c. prevention of injury
2. list the correct procedure for maintaining clean bedding:
 - a. mucking out and bedding down as part of a daily routine
 - b. removal of dirty bedding
 - c. removal of droppings throughout the day
 - d. topping up bedding
3. list different types of bedding materials to include:
 - a. straw
 - b. shavings
 - c. paper
 - d. rubber floors
 - e. aubiose
 - f. medi bed materials
4. list the requirements of good quality bedding materials:
 - a. clean
 - b. dust free
 - c. mould free
 - d. warmth
 - e. comfort
5. state the need for the replacement of bedding materials to maintain a comfortable bed for the horse to the required depth:
 - a. shavings
 - b. straw
 - c. paper
 - d. rubber floor
 - e. deep litter
6. state the maintenance requirements of the muck heap/trailer and the surrounding area:
 - a. muck is contained within the heap/trailer
 - b. keep muck heap/trailer neat

Outcome 2: Groom horses

Practical activities

The learner will be able to:

1. groom the horse in preparation for ridden work
2. care for the horse's needs following ridden work

Underpinning knowledge

The learner will be able to:

1. state the reasons for grooming horses:
 - a. health and hygiene
 - b. appearance
 - c. human horse relationships
 - d. checking for injury
2. state the correct procedure for grooming horses:
 - a. horses living at grass
 - b. stable kept horses
 - c. brushing off and quartering
3. state the safety considerations when grooming horses:
 - a. securing horse when grooming in order that the horse cannot turn, bite or escape
 - b. care with ticklish areas
 - c. using the correct brush for the depth of coat and the sensitivity of the skin
 - d. correct positioning in order to ensure against the possibility of being kicked
4. list the correct procedure for caring for a horse after work:
 - a. loosening girth and removing tack
 - b. walk horse down
 - c. sweating horses
 - d. blowing horses (breathing heavily).

5. list the parts of the grooming kit:
 - a. dandy brush
 - b. body brush
 - c. curry comb
 - d. hoof pick
 - e. water brush
 - f. long bristle dandy brush
 - g. stable rubber
 - h. mane and tail comb
 - i. plastic curry comb
 - j. rubber curry comb
 - k. sweat scraper
 - l. sponges
6. state the use of each part of a grooming kit:
 - a. dandy brush
 - b. body brush
 - c. curry comb
 - d. hoof pick
 - e. water brush
 - f. long bristle dandy brush
 - g. stable rubber
 - h. mane and tail comb
 - i. plastic curry comb
 - j. rubber curry comb
 - k. sweat scraper
 - l. sponges

Outcome 3: Put on and remove horse clothing

Practical activities

The learner will be able to:

1. put on and secure stable and outdoor rugs
2. remove stable and outdoor rugs
3. clean stable and outdoor rugs

Underpinning knowledge

The learner will be able to:

1. list the different types of rugs and their use. Rugs to include:
 - a. day and night
 - b. thermal and jute
 - c. rugs with cross over straps
 - d. self righting rugs, rollers fitted with blankets
 - e. exercise sheets
 - f. turn out and New Zealand
 - g. sweat rugs and coolers
2. state how to put on rugs including rugs for stable and outdoor use:
 - a. secure horse
 - b. fold rug before putting on
 - c. fold back into place
 - d. secure straps
3. state how to remove rugs including rugs for stable and outdoor use:
 - a. secure horse
 - b. undo straps
 - c. fold back rug and remove backwards
4. state how to clean and maintain rugs for daily use:
 - a. dry and wet clean
 - b. daily, weekly, annually

Outcome 4: Tack up and un-tack horses

Practical activities

The learner will be able to:

1. tack horses for ridden exercise
2. untack horses following ridden exercise

Underpinning knowledge

The learner will be able to:

1. state the correct safe procedure for approaching horses and putting on a saddle and bridle
2. list the correct safe procedures for approaching horses and removing a saddle and bridle
3. name nosebands in common use:
 - a. drop
 - b. flash
 - c. grackle
 - d. cavesson
4. name different types of saddles used for:
 - a. dressage
 - b. show jumping
 - c. general purpose
5. name the parts of a saddle and bridle.

Outcome 5: Clean tack

Practical activities

The learner will be able to:

1. clean tack
2. take apart and assemble bridles and saddles

Underpinning Knowledge

The learner will be able to:

1. list the reasons for cleaning saddles and bridles:
 - a. general cleanliness
 - b. appearance
 - c. safety
 - d. promote life of the tack
 - e. promote good working practice
2. state the need to keep leather supple and safe:
 - a. promote safety
 - b. preserve the leather
3. list the safety considerations when maintaining equipment:
 - a. pressure points, weight bearing and where the leather folds
 - b. tension points on reins and stirrup leathers
 - c. general stitching on all parts of saddle and bridles
4. list the equipment required for the cleaning of tack:
 - a. bowl/bucket
 - b. sponges and cloths
 - c. saddle soap, glycerine, oil
 - d. access to hot water
 - e. brush or abrasive
5. state the tack cleaning process:
 - a. preparation
 - b. when to take tack apart
 - c. methods of cleaning
 - d. the use of preservative
 - e. putting tack together.

6. state the care of different materials:
 - a. leather
 - b. nylon
 - c. synthetic tack
 - d. fabrics
7. state the different general care provided for types of girth:
 - a. leather
 - b. balding
 - c. three fold
 - d. fabrics

Unit 133 Exercise horses under supervision

Level 1	50 GLH	6 credits
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Rationale

This unit enables learners to mount and dismount and ride horses in an enclosed space under supervision. They will be able to ride well-mannered horses in an enclosed space in the paces of walk trot and canter, maintain a balance when riding on the flat and over ground poles.

Outcomes

There are two outcomes to this unit. The learner will be able to:

1. prepare for mounting and dismounting
2. ride in an enclosed space

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
133	Exercise horses under supervision	Horse care Unit 106.1	Horse care Unit 106.1	1-6	c, d
		Horse care Unit 106.2	Horse care Unit 106.2	1-5	b, c

Outcome 1: Prepare for mounting and dismounting

Practical activities

The learner will be able to:

1. prepare for ridden exercise
2. lead tacked horse to enclosed arena
3. mount and dismount

Underpinning knowledge

The learner will be able to:

1. state the procedure for leading a horse in hand:
 - a. positioning of handler
 - b. turning horses
 - c. positioning of right and left hands on the rein
 - d. turning
2. list the equipment required for leading a horse in hand:
 - a. handler, gloves, hat, correct footwear
 - b. horse, bridle
3. list the safety checks necessary prior to mounting:
 - a. saddle
 - b. girth
 - c. bridle
 - d. positioning with regard to other horses and people
4. state the procedure for mounting:
 - a. from the ground
 - b. from a mounting block
 - c. receiving a leg up
5. state how to dismount and prepare the horse for returning to the stable:
 - a. positioning of horse
 - b. dismounting technique
 - c. loosen girth
 - d. leading in hand
 - e. awareness of other horses and people

Outcome 2: Ride in an enclosed space

Practical activities

The learner will be able to:

1. maintain a balanced riding position
2. ride basic school figures
3. apply aids for walk, trot, canter and transitions
4. ride over ground poles

Underpinning knowledge

The learner will be able to:

1. state the basic riding position for legs, seat, upper body and arms
2. state how to ride:
 - a. 20m circles
 - b. diagonal change of rein
 - c. changes through circles and across the school
3. list the aids for upward and downward transitions to include:
 - a. halt to walk
 - b. walk to trot
 - c. trot to canter
 - d. canter to trot
 - e. trot to walk
 - f. walk to halt
4. list the aids for turns and circles
5. state the distance between trotting poles
6. list the procedure for riding over trotting poles:
 - a. pace
 - b. line
 - c. riding position over poles
7. state the importance of riding the correct line to trotting poles:
 - a. balance
 - b. pace
 - c. visual awareness

Unit 134 Maintain the health of horses

Level 1	50 GLH	6 credits
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Rationale

This unit enables learners to deal with general health problems associated with every day care of the horse in the stable and kept out at grass.

Outcomes

There are four outcomes to this unit. The learner will be able to:

1. identify signs of good and poor health
2. care for the sick horse
3. treat horse ailments
4. move the horse in hand and turn out

Assessment

The outcomes for this unit will be assessed using evidence from an assignment which will cover both practical activities and underpinning knowledge for the unit.

Signposting to National Occupational Standards

Level 1 Land Based Studies		Lantra SSC National Occupational Standards			
Unit	Title	Unit No.	Element No.	Performance Criteria	Knowledge and understanding
134	Maintain the health of horses	Horse care Unit 104.1	Horse care Unit 104.1	1 – 5	a – e
		Horse care Unit 104.2	Horse care Unit 104.2	4, 5, 6	f

Unit 134

Outcome 1: Identify signs of good and poor health

Practical activities

The learner will be able to:

1. identify signs of good health
2. recognise signs of poor health

Underpinning knowledge

The learner will be able to:

1. list the signs of good health:
 - a. temperature, pulse and respiration
 - b. weight
 - c. condition of coat and skin
 - d. normal intakes of food, hay and water
 - e. normal amount of droppings daily
2. list signs of sickness and poor health:
 - a. temperature, pulse and respiration
 - b. weight, recognising underweight or overweight
 - c. condition of coat and skin, dull staring coat, dehydration
 - d. normal daily intakes of food, hay and water
 - e. normal amount of droppings daily, type of droppings
 - f. behaviour
3. state how to physically examine the horse for warmth in the stable and when turned out to grass:
 - a. base of ears
 - b. under the rugs
4. list the factors that can influence the condition and the health of horses:
 - a. temperature
 - b. environment
 - c. routine
 - d. work
 - e. feeding
 - f. age
 - g. parasites
5. identify the physical characteristics of the horse to include:
 - a. condition
 - b. colour
6. list the contents of an equine medicine cupboard.

Outcome 2: Care for a sick horse

Practical activities

The learner will be able to:

1. maintain normal body temperature
2. set stable for a sick horse

Underpinning knowledge

The learner will be able to:

1. list the basic principles for caring for the sick horse:
 - a. warmth
 - b. bedding
 - c. water and feed
 - d. comfort
 - e. monitoring
2. state the significance of maintaining body temperature:
 - a. signs of the horse being unwell
 - b. when to call the vet
3. state the importance of keeping the air clean for respiratory care
4. state the importance of regular checks for the purpose of monitoring
5. list the reasons for maintaining health records, and when to report changes
6. state the importance of water to maintain health, digestion and body temperature
7. state the amount of water a horse will require daily:
 - a. working
 - b. turned out to grass, winter, summer
 - c. stabled
 - d. varying temperatures
 - e. maintenance

Outcome 3: Treat horse ailments

Practical activities

The learner will be able to:

1. check a horse for injury
2. identify possible sites of injury
3. identify common ailments

Underpinning knowledge

The learner will be able to:

1. list different types of wounds:
 - a. incised (clean cut)
 - b. puncture
 - c. lacerated (torn)
 - d. contused (bruised)
2. state common wounds, skin damage, ailments to include:
 - a. mud fever
 - b. nettle rash (hives, urticaria)
 - c. rain scald
 - d. cracked heels
 - e. sweet itch
 - f. ringworm
 - g. colic
3. explain the basic treatment for wounds:
 - a. holding the horses
 - b. procedure for cleaning wounds
 - c. antiseptic
 - d. equipment to use
 - e. disposing of used equipment
4. state the causes of leg wounds:
 - a. kick
 - b. blow
 - c. sharp object
 - d. skin condition
5. state the need to record treatment as part of monitoring the progress and health of horses
6. state when to call a vet:
 - a. general condition of the horse
 - b. behaviour
 - c. temperature.

Outcome 4: Move the horse in hand and turn out

Practical activities

The learner will be able to:

1. fit appropriate equipment to the horse for the purpose of walking and trotting in hand and/or turning out
2. walk and trot the horse for the purpose of examination
3. turn horse into enclosed space

Underpinning knowledge

The learner will be able to:

1. name the equipment to be used for moving the horse in hand: e.g. bridle
2. list safe equipment for the handler:
 - a. gloves
 - b. hat
 - c. appropriate footwear
3. state the correct procedure for moving the horse in hand in walk and trot:
 - a. holding the horse
 - b. moving in a straight line
 - c. surface
4. state the correct method of turning a horse in hand:
 - a. to the right
 - b. away from handler
5. list the precautions to be taken into account when turning horses out into an enclosed space:
 - a. equipment fitted to the horse
 - b. handlers clothing
 - c. moving the horse to the enclosed space
 - d. entering the area
 - e. turning to face the gate
6. state the correct process for turning a horse into an enclosed space:
 - a. equipment fitted to the horse
 - b. handlers clothing
 - c. moving the horse to the enclosed space
 - d. entering the area
 - e. turning to face the gate