

Environmental and Land-based Studies (Level 1 Year 1)

Unit 1: The natural environment

Unit 4: Working with plants and animals

Unit 5: Introducing the role and value of plants and animals to society

Sample of integrated schemes of work aimed at covering three teaching sessions, on a single teaching day, delivered over an average academic teaching year of 35 weeks

This is an example of a possible scheme of work. You can use it as it is, adjust it, or extract content to create a scheme of work to suit your delivery needs. It can also be adjusted by referring to the scope on the pages indicated. It is recommended that you refer to the scope and the marking grid, for lesson planning, to ensure the scope and marking criteria are covered thoroughly.

Unit 1: The natural environment

Total GLH	30, including approximately 5 hours for assessment
Delivery model	Based on (mainly) teaching a minimum of 1 hour per week over 35 weeks, including assessment.
Aim	<p>This unit looks at the basic components of the natural world. Learners will:</p> <ul style="list-style-type: none"> • consider the factors affecting habitats and species present • discover the importance of recording information and learn how to use the information to make recommendations for land use.
Notes	Habitat surveys and studies are best carried out spring to autumn for a range of plant and animal species. Surveys in winter (dormant months) may only be suitable for woody plant species, eg shrubs and trees such as maple, pine and apple trees.

Unit 4: Working with plants and animals

Total GLH	60, including 10 hours for assessment
Delivery model	Based on teaching a minimum of 2 hours per week over 35 weeks, including assessment/assignment
Aim	To introduce learners to why plants and animals matter and how we can provide for them
Notes	This unit links to other Level 1 units, particularly Unit 5.

Unit 5: Introducing the role and value of plants and animals to society

Total GLH	30, including a one-hour exam
Delivery model	Based on teaching a minimum of 1 hour per week over 35 weeks, including an external exam
Aim	The purpose of this unit is to introduce learners to the role and value of plants and animals to society.
Notes	This unit links closely to other foundation units. It is suggested that this unit is delivered after Units 1, 2 and 4 to enable application of knowledge from those units.

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
	Session 1 – Lesson duration 1–1½ hrs						
1	<p>Induction</p> <p>Introduction to the programme to include evidence of competence, assessments (controlled), assignments – practical and theory, witness testimonies and examination. Also explain PLTS and FS integration.</p> <p>Health and Safety should be discussed as well as methods of recording evidence, eg HSE Five steps of a risk assessment and accident forms.</p>	Theory	All	Specifications Health and Safety documents	All	All	Discuss how the units relate to one another Unit 3
	Session 2 – Lesson duration 1–1¼ hrs						
1	<p>Identify the relevant tools and equipment associated with handling and care of animals, whilst also demonstrating their safe use and storage.</p> <p>Organise a working log including witness statements and a record of safe practice, by recording activities on a HSE Risk assessment sheet.</p> <p>Access the five steps of the risk assessment leaflet on the following website: www.hse.gov.uk/risk/fivesteps.htm</p>	Theory & Practical	AC4.2a/b	Page 52		E	Unit 3
	Session 3 – Lesson duration 1–1¼ hrs						
1	<p>Identify the relevant tools and equipment associated with the care of plants in wild and managed environments, whilst also demonstrating their safe use and storage.</p>	Theory & Practical	AC4.2a/b	Page 52		E	Unit 3
	Session 1 – Lesson duration 1–1¼ hrs						

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
2	<p>Introduce learners to methods for recording the weather. They will be collecting data over the next few weeks for their autumn/winter survey, which will provide information towards assessing the impacts of weather patterns/climate on the environment of the habitat being studied.</p> <p>The weather watch will need to be carried out for a minimum of four weeks. See weeks 5, 6, 9, 10 for the autumn survey and weeks 20, 21, 22 for the spring survey. Explain to learners how to record all data from research on Excel spreadsheets.</p> <p>(There are 3 hours allocated for this activity, however up to 8 hours are acceptable for learners to collate the range of data required.)</p> <p><u>The weather survey</u> can be carried out by using the following measuring methods: rain gauge; wind anemometer; pressure barometer; temperature thermometer (mercury and/or digital); recording amounts of sunlight by using a mirror on the ground when there is cloud cover and more sophisticated sunlight analysers available. All the above data offer learners the opportunity to gather data to calculate mean, median, mode and range. Also graphs can be produced and additions made.</p> <p><u>The soil survey</u> can be carried out by using PH soil probes or universal indicators in a moistened sample; sieving or sedimentation for soil texture; soil texture testing by rolling soil into a ball to see how it breaks when it falls to the ground. For soil analysis, collect a soil sample with a corer or auger. Take 25 samples across the field, mix samples and send to a laboratory for analysis. Learners to interpret the result by using ratio and proportion.</p>	Theory	AC1.3a/b	Pages 18–19		E M ICT	Unit 6
	Session 2 – Lesson duration 1–1¼ hrs						
2	Learners prepare record sheets using Excel to compile a working log. It will be used to record 3 hours of research, for a holistic approach to	Practical	AC1.3b	Page 17	SM1	E	Unit 6

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
	<p>internal assessment.</p> <p>Learners to include the following headings:</p> <ul style="list-style-type: none"> • New skills learnt • Tools/equipment used • Signs of ill health of plants observed • Signs of ill health of animals observed • Signs of healthy growth of plants observed • Signs of health in animals observed • Wild plant species and cultivated plant species identified • Wild animal and domesticated animal species identified <p>A witness statement for each animal and plant species, including details of care must be included in working log.</p> <p>Provide columns for date, time and teacher/learner signatures.</p>		<p>AC1.4a/b</p> <p>Unit 4</p>	<p>Page 19</p> <p>Page 51–55</p>		<p>M</p> <p>ICT</p>	
Session 3 – Lesson duration 1–1¼ hrs							
2	<p>Explain basic components of a range of different habitats. Provide learners with an understanding of the similarities as well as the differences between habitats (as listed in the specification).</p> <p>Outline how plants and animals are linked in a feeding web and how to interpret a simple web comprising at least three trophic levels. Use the following lesson plan, relating to food webs, to include learners in a group activity exercise.</p> <p>LESSON – Cedar Glade Food Web</p>	<p>Theory & Practical</p>	<p>AC1.1a/b</p> <p>AC1.2a</p>	<p>Page 17</p>		<p>E</p> <p>M</p> <p>ICT</p>	
Session 1 – Lesson duration 1–1¼ hrs							
3	<p>Explanation of how to conduct a survey of a habitat using simple field techniques.</p>	<p>Theory & Practical</p>	<p>AC1.4a/b/c</p>	<p>Page 19</p>	<p>TW1</p>	<p>E</p>	<p>Unit 2</p>

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
	<p>Re-cap the survey methods explained in week 2 session 1, using Excel spreadsheets to record data and identify opportunities to begin producing graphs.</p> <p>Discuss predicted evaluation of research and analysis and how best to communicate the data, by using ratio and proportion, graphs, diagrams or charts to eventually communicate findings.</p> <p>When learners are identifying plants and animals in the habitat, they can also estimate the proportion of species.</p> <p>Learners and teachers discuss additional methods of recording detail in working logs, by using video footage and photographs.</p> <p>Learners to choose a partner to work with on the surveys.</p>		Unit 4	Page 51–55	IE2	M ICT	
	Session 2 – Lesson duration 1–1¼ hrs						
3	<p>Explain each level of consumption in a food chain (which is described as a trophic level) and define its relationship to biodiversity.</p> <p>Learners to work in pairs with tutor guidance and research tools available, to identify questions to answer and problems to solve for the group, including the following study on a real habitat.</p> <ul style="list-style-type: none"> • Plants that are consumed directly by humans • Plants used as food for herbivores/omnivores, which are kept by humans • Herbivores and their food products consumed by humans • Carnivores eaten by humans • The different degrees of biodiversity in this habitat and the relationship to the above 	Theory & Practical	AC5.1c	Page 63			

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
	<ul style="list-style-type: none"> Assess how consumption of these products by humans and animals affects the biodiversity of the ecosystem positively and negatively 						
	Session 3 – Lesson duration 1–1¼ hrs						
3	<p>Recognise different levels of biodiversity, by using an interactive white board and accessing the following website:</p> <p>http://ec.europa.eu/environment/nature/biodiversity/economics/</p> <p>Use further information from the website:</p> <p>Monoculture – Wikipedia</p> <p>Outline to learners the implications for the biodiversity of a habitat of monoculture production.</p>	Practical	AC5.1a/b/c AC1.2a AC1.3a/b	Page 63 Page 17 Pages 18–19	TW1		
	Session 1 – Lesson duration 1–1¼ hrs						
4	<p>Learners carry out non-routine care of plants (as part of 2 hours allocated).</p> <p>Ensure that learners are able to identify some common plants and animals in production systems. The system can be wild or managed but has to contain a mixture of plants and animals.</p> <p>Learners complete working log (part of 3 hours allocated for research).</p>	<p>Practical</p> <p>30 mins of allocated assessment time</p> <p>Theory</p> <p>30 mins of allocated assessment time</p>	AC1.1b AC4.4a AC1.3a/b Unit 4	Pages 17 Page 51 Pages 18–19 Page 55	IE2	E ICT	Unit 2
	Session 2 – Lesson duration 1–1¼ hrs						

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
4	Learners carry out non-routine care of plants (as part of 2 hours allocated). Ensure that learners are able to identify some common plants and animals in production systems. The system can be wild or managed but has to contain a mixture of plants and animals Learners complete working log (part of 3 hours allocated for research).	Practical 30 mins of allocated assessment time Theory 30 mins of allocated assessment time	AC1.1b AC4.4a AC1.3a/b Unit 4	Page 17 Page 53 Pages 18–19 Pages 51–55	IE2	E ICT	Unit 2
Session 3 – Lesson duration 1–1¼ hrs							
4	As part of a team, learners practise carrying out a survey of an environment/habitat in the local area that has public access for learners to assess the habitat's impact on humans. Ensure that the habitat has at least three trophic levels of plants and animals equally, which will have some use to society, eg recreational, nutritional, medical, etc.	Practical & Theory	AC5.3a AC5.3b AC4.4a	Page 63	TW1 IE2	E	Unit 2 Unit 6
Session 1 – Lesson duration 1–1¼ hrs							
5	Carry out weekly soil analysis and weather watch and record findings. Refer to week 2 for details.	Theory & Practical	AC1.3a AC1.4a/b AC4.2a/b	Pages 18–19 Page 52	IE2 SM1 SM3		Unit 6 Unit 2
Session 2 – Lesson duration 1–1¼ hrs							
5	Explain the physical and behavioural qualities of the plants and animals found in a habitat and how they match to the habitat's conditions. Include	Theory	AC1.1b	Page 17			Unit 6

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
	<p>how the biotic parts of the ecosystem, which include plants, animals, bacteria and fungi, and the physical (abiotic) environmental factors, such as light, temperature, rainfall, water, soil, oxygen and other chemical elements and pollution, affect the plants and animals that exist there.</p> <p>Teacher to display plants in soils suited to them, for visual explanation and use a DVD to indicate environments that suit particular species of animals, eg guinea pigs and chinchillas originating from South America, sheep suited to high ground and cows producing more milk on fertile low land.</p>						
	Session 3 – Lesson duration 1–1¼ hrs						
5	Explain the key factors affecting the growth and distribution of plants and animals in a habitat, using a PowerPoint presentation.	Theory	AC1.3 b	Pages 18–19			
	Session 1 – Lesson duration 1–1¼ hrs						
6	<p>Describe common plant and animal production systems that are wild or managed and contain a mixture of plants and animals, particularly species not available for practical observation in learner’s on-going working environment/habitat study.</p> <p>Teacher should use sample plants for visual learning and conduct a ‘spot test’ for learners to reinforce learning.</p>	Theory	AC1.3c	Page 18			Unit 2
	Session 2 – Lesson duration 1–1¼ hrs						
6	<p>Learners carry out non-routine care of plants (as part of 2 hours allocated).</p> <p>Ensure that learners are able to identify some common plants and animals in production systems. The system can be wild or managed but has to</p>	<p>Practical</p> <p>30 mins of allocated assessment</p>	AC1.1b	Page 17	IE2 SM1 SM3	E ICT	Unit 2

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
	contain a mixture of plants and animals. Learners complete working log (part of 3 hours allocated for research).	time Theory 30 mins of allocated assessment time	Unit 4	Pages 51–55	TW1		
Session 3 – Lesson duration 1–1¼ hrs							
6	Learners carry out weekly soil analysis and weather watch and record findings. Learners carry out non-routine care of plants (as part of 2 hours allocated) whilst also identifying the conditions required for healthy plant and animal growth and reproduction, with particular reference to cultivated and wild plants. Learners complete working log (part of 3 hours allocated for research).	Practical Last 30 mins of allocated assessment time (plants) Theory 30 mins of allocated assessment time	AC1.3a/b AC1.4a/b AC1.3c Unit 4	Pages 18–19 Pages 51–55	IE2 SM1 SM3 TW1		
Session 1 – Lesson duration 1–1¼ hrs							
7	Explain common plant pests, disorders and diseases. Learners carry out non-routine care of animals (as part of 2 hours allocated) whilst also identifying the conditions required for healthy animal	Theory Practical	AC4.1b Unit 4	Page 51 Page 54–55	IE2 SM1 SM3	E ICT M	

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
	growth and reproduction, with particular reference to wild and domesticated animals.	30 mins of allocated assessment time			TW1		
	Session 2 – Lesson duration 1–1¼ hrs						
7	Explain signs of health and illness in animals and show learners a relevant RSPCA DVD/video.	Theory	AC4.1c	Page 51		E ICT M	
	Session 3 – Lesson duration 1–1¼ hrs						
7	Learners carry out non-routine care of animals, and complete working log/witness statements (part of 2 hours allocated). Learners should concentrate particularly on observing health and environmental conditions that positively or negatively affect the reproduction of animals.	Theory & Practical 30 mins of allocated time	Unit 4	Page 54–55	IE2 SM1 SM3 TW1	E ICT	
	Session 1 – Lesson duration 1–1¼ hrs						
8	Learners work in pairs to prepare five multiple choice questions relating to health and safety, use of feeding equipment and managing cleaning equipment/solutions safely. Learners complete working log (part of 3 hours allocated for research).	Practical Theory 30 mins of allocated assessment time	AC4.2a Unit 4	Page 52 Pages 51–55	IE2 SM1 SM3 TW1	E ICT	
	Session 2 – Lesson duration 1–1¼ hrs						

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
8	<p>Learners carry out safe care of animals and complete working log/witness statements (part of 2 hours allocated).</p> <p>Learners should concentrate particularly on observing health and environmental conditions that positively or negatively affect reproduction of animals.</p> <p>Learners complete working log (part of 3 hours allocated for research).</p>	<p>Practical</p> <p>30 mins of allocated assessment time</p> <p>Theory</p> <p>15 mins of allocated assessment time</p>	<p>AC1.3c</p> <p>Unit 4</p>	<p>Page 18</p> <p>Pages 51–55</p>	<p>IE2</p> <p>SM1</p> <p>SM3</p> <p>TW1</p>		Unit 2
Session 3 – Lesson duration 1–1¼ hrs							
8	<p>Learners carry out safe care of animals and complete working log/witness statements (part of 2 hours allocated).</p> <p>Learners should concentrate particularly on observing health and environmental conditions that positively or negatively affect reproduction of animals.</p> <p>Learners complete working log (part of 3 hours allocated for research).</p>	<p>Practical</p> <p>Last 30 mins of allocated time (animals)</p> <p>Theory</p> <p>Last 15 mins of allocated assessment time (research)</p>	<p>AC1.3c</p> <p>Unit 4</p>	<p>Page 18</p> <p>Pages 51–55</p>	<p>IE2</p> <p>SM1</p> <p>SM3</p> <p>TW1</p>	<p>E</p> <p>ICT</p>	Unit 2
Session 1 – Lesson duration 1–1¼ hrs							

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
9	Student-centred research to recognise common plant and animal pests, disorders and diseases not already identified, eg insects, slugs, snails, rodents and birds, fungus, virus, bacteria and environmental conditions.	Theory	AC4.1b	Page 51	IE2 TW1 SM3		
Session 2 – Lesson duration 1–1¼ hrs							
9	Carry out weekly soil analysis and weather watch and record findings. Refer to week 2 for details.	Practical & Theory	AC1.3a AC4.2a/b	Page 18 Page 52	IE2 SM1 SM3		Unit 2
Session 3 – Lesson duration 1–1¼ hrs							
9	Explain common animal pests, disorders and diseases relating to the ears, nose, mouth, and skin and body covering of birds, ie fur/feathers, scales, of a range of wild and domesticated species. Access websites and display details on interactive white board. <i>For relevant websites see page 48</i> Veterinary journals, with relevant case studies, can also be circulated amongst learners.	Theory	AC4.1b	Page 51			Unit 2
Session 1– Lesson duration 1–1¼ hrs							
10	Working in pairs, learners practically observe a range of animal behaviour to recognise signs of health and illness in animals. They should focus particularly on posture, movement, behaviour, appetite and water intake.	Theory & Practical	AC4.1c	Page 51			Unit 2
Session 2 – Lesson duration 1–1¼ hrs							
10	Working in pairs, learners practically observe a range of animal behaviour to recognise signs of health and illness in animals. They should focus	Theory &	AC4.1c	Page 51			

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
	particularly on breathing, appetite and water intake.	Practical					
	Session 3 – Lesson duration 1–1¼ hrs						
10	Carry out weekly soil analysis and weather watch and record findings. Refer to week 2 for details. End of autumn survey analysis	Practical & Theory	AC1.3a/b AC1.4a/b AC4.2a/b	Pages 18–19 Page 52	IE2 SM1 SM3		Unit 2
	Session 1 – Lesson duration 1–1¼ hrs						
11	Student-centred research to identify a range of common wild and domesticated/managed animals, not already identified.	Theory & Practical	AC4.3a	Page 52		IE2 SM3	
	Session 2 – Lesson duration 1–1¼ hrs						
11	Explain the characteristics of the five classes of vertebrate, which underpin the classifications. Use a PowerPoint presentation and gapped worksheets for learners.	Theory	AC4.3a	Page 52			
	Session 3 – Lesson duration 1–1¼ hrs						
11	Using a PowerPoint presentation and gapped worksheets for learners, explain feeding, watering, housing, health and welfare of domesticated animals. Identify common failings in animal care, why they arise and how they can be avoided. Refer to the RSPCA five freedoms and the Animal Welfare Act 2006 by accessing the following websites and displaying on interactive white board. <u>The five freedoms</u> and <u>Animal Welfare Act 2006</u>	Theory	AC4.3a	Page 52			Unit 2
	Session 1 – Lesson duration 1–1¼ hrs						

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
12	Using a PowerPoint presentation and gapped worksheets for learners, explain feeding, watering, housing, health and welfare of badgers, foxes, minks, and other mammals. Identify common failings in animal care, why they arise and how they can be avoided. Refer to the RSPCA five freedoms and the Animal Welfare Act 2006 by accessing the following websites and displaying on interactive white board. The five freedoms and Animal Welfare Act 2006	Theory	AC4.3a	Page 52			
	Session 2 – Lesson duration 1–1¼ hrs						
12	Learners work in groups to create crosswords/word searches using information from previous lessons. The puzzles should relate to the RSPCA five freedoms and the Animal Welfare Act 2006.	Theory & Practical	AC4.3a	Page 52	IE2	E M ICT	Unit 2
	Session 3 – Lesson duration 1–1¼ hrs						
12	Learners exchange quizzes created in the previous session and complete in their groups.	Theory	AC4.3a	Page 52	IE2	E M ICT	Unit 2
	Session 1 – Lesson duration 1–1¼ hrs						
13	Learners carry out safe care of birds.	Practical	AC4.3b	Page 52	SM1 TW1 TW5	E M ICT	Unit 2
	Session 2 – Lesson duration 1–1¼ hrs						
13	Learners carry out safe care of wild birds.	Practical	AC4.3b	Page 52	SM1		

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
					TW1 TW5		
	Session 3 – Lesson duration 1–1¼ hrs						
13	Learners carry out safe care of reptiles.	Practical	AC4.3b	Page 52	SM1 TW1 TW5		
	Session 1 – Lesson duration 1–1¼ hrs						
14	Learners carry out safe care of amphibians and fish.	Practical	AC4.3b	Page 52	SM1 TW1 TW5		
	Session 2 – Lesson duration 1–1¼ hrs						
14	Learners carry out safe care of amphibians and fish.	Practical	AC4.3b	Page 52	SM1 TW1 TW5		
	Session 3 – Lesson duration 1–1¼ hrs						
14	Learners carry out safe care of mammals.	Practical	AC4.3b	Page 52	SM1 TW1 TW5		Unit 2
	Session 1 – Lesson duration 1–1¼ hrs						
15	Describe the value of plants to society.	Practical	AC5.1b	Page 63	IE2	E	Unit 2

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
	Learners visit a florists/garden centre establishment. Learners make notes, collect leaflets for future research and ask owner for permission to take photographs.						
	Session 2 – Lesson duration 1–1¼ hrs						
15	Describe the value of plants to society. Learners visit a florists/garden centre establishment. Learners complete gapped handouts relevant to assessment criteria.	Theory & Practical	AC5.1b	Page 63	IE2	E	Unit 2
	Session 3 – Lesson duration 1–1¼ hrs						
15	Describe the value of animals to society. Group discussion/debate to include financial contribution and aesthetic values.	Practical	AC5.1b	Page 63	CT1/2/4 IE3/5/6 EP5/6 TW2 SM7		Unit 2
	Session 1 – Lesson duration 1–1¼ hrs						
16	Describe how animals are used by society. Learners visit a large pet store/rare breed centre and complete gapped handouts relevant to assessment criteria.	Theory & Practical	AC5.1a	Page 63	IE2	E	Unit 2
	Session 2 – Lesson duration 1–1¼ hrs						
16	Describe how animals are used by society. Use a PowerPoint presentation to show recreational significance and	Theory & Practical	AC5.1a	Page 63			Unit 2

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
	products that facilitate human health.						
	Session 3 – Lesson duration 1–1¼ hrs						
16	Describe how plants and animals are used by society (food and drink). In week 15 ask learners to bring a plant and animal source to this lesson for group discussion or individual presentation.	Theory & Practical	AC5.1a	Page 63	IE2		Unit 2
	Session 1 – Lesson duration 1–1¼ hrs						
17	Describe how combinations of environmental factors, plants and animals create shelter and protection. Use gapped worksheets with clues and spell-check lists for learners to complete by inserting key words.	Theory & Practical	AC5.2a	Page 63			Unit 2 Unit 6
	Session 2 – Lesson duration 1–1¼ hrs						
17	Describe how combinations of environmental factors, plants and animals create tools, materials and clothing. Use gapped worksheets with clues and spell-check lists for learners to complete by inserting key words.	Theory & Practical	AC5.2a AC4.2a AC4.2b	Page 63 Page 52			Unit 2 Unit 6
	Session 3 – Lesson duration 1–1¼ hrs						
17	Describe how combinations of environmental factors, plants and animals create transport, chemicals and energy. Use gapped worksheets with clues and spell-check lists for learners to complete by inserting key words.	Theory & Practical	AC5.2a	Page 63			Unit 2 Unit 6
	Session 1 – Lesson duration 1–1¼ hrs						
18	Describe how combinations of environmental factors, plants and animals create different medicines and pharmaceuticals, and how they also create recreation and leisure opportunities.	Theory	AC5.2a	Page 63			Unit 2 Unit 6

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
	Session 2 – Lesson duration 1–1¼ hrs						
18	Student-centred research to identify the potential threats to plants, animals and the environment from human impact, specifically relating to recreation and leisure.	Theory & Practical	AC5.2b	Page 64	IE2	ICT	Unit 2 Unit 6
	Session 3 – Lesson duration 1–1¼ hrs						
18	Student-centred research <i>continued</i> Group discussion/debate on findings.	Theory & Practical	AC5.2b	Page 64	IE2/5/6 CT1/2/ 4 TW4		Unit 2 Unit 6
	Session 1 – Lesson duration 1–1¼ hrs						
19	Use a PowerPoint presentation to explain the potential threats to plants, animals and the environment from human impact, specifically the role of environmental management.	Theory	AC5.2b	Page 64			Unit 2 Unit 6
	Session 2 – Lesson duration 1–1¼ hrs						
19	Invite a guest speaker who works in the Environmental and Land-based sector and who will have valuable knowledge of how plants and animals are used by society and their different benefits to the environmental and land-based businesses and enterprises, to talk to learners.	Practical	AC5.4a	Page 64			Unit 2 Unit 6
	Session 3 – Lesson duration 1–1¼ hrs						
19	Mind-mapping exercise for learners to discuss and analyse the perspectives of businesses and enterprises working with animal plant products, commodities and services, and individuals and organisations working to protect plants and animals.	Practical	AC5.4a	Page 64	IE1/5/6 TW1 RL5		Unit 2 Unit 6

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
					SM7		
	Session 1 – Lesson duration 1–1¼ hrs						
20	Field visit – for learners to identify the benefits of different plants and animals in a habitat, focusing on looking for flora and fauna in a range of different open spaces and also in professionally managed production areas, such as commercial animal and plant production sites. Learners to take photographs and make notes of observations.	Practical & Theory	AC5.4a	Page 64	TW1 IE2		Unit 2 Unit 6
	Session 2 – Lesson duration 1–1¼ hrs						
20	Learners to identify how they can benefit from shadowing employees working on important projects in relevant environmental and land-based businesses and enterprises. Learners to carry out shadowing exercise in personal time if not possible at college/school.	Practical	AC5.4a	Page 64	IE2 IE4	E M ICT	Unit 6
	Session 3 – Lesson duration 1–1¼ hrs						
20	Carry out weekly soil analysis and weather watch and record findings. Refer to week 2 for details (spring survey).	Practical & Theory	AC1.3a/b AC1.4a/b AC4.2a/b	Pages 18–19 Page 52	IE2 SM1 SM3	E M ICT	Unit 6
	Session 1 – Lesson duration 1–1¼ hrs						
21	Explain how environmental and land-based businesses and enterprises work with plants and animals in a habitat, by encouraging learners to identify a range of ways in which the different plants and animals in a habitat might be used to best commercial and environmental advantage. Learners to mind-map in groups and teacher to offer ideas.	Theory & Practical	AC5.4b	Page 64	TW1 RL5 SM7	E	Unit 2 Unit 6

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
	Session 2 – Lesson duration 1–1¼ hrs						
21	Session 1 <i>continued</i>	Theory	AC5.4b	Page 64	TW1 RL5 SM7	E	Unit 2 Unit 6
	Session 3 – Lesson duration 1–1¼ hrs						
21	Carry out weekly soil analysis and weather watch and record findings. Refer to week 2 for details (spring survey).	Practical & Theory	AC1.3a/b AC1.4a/b AC4.2a/b	Pages 18–19 Page 52 Page 64	IE2 SM1 SM3	E M ICT	Unit 2
	Session 1 – Lesson duration 1–1¼ hrs						
22	Explain how environmental and land-based businesses and enterprises work with plants and animals in a habitat, by evaluating the suitability and effectiveness of the processes and procedures adopted by enterprises when working with its plants and animals in the habitat. Use a PowerPoint presentation and internet interactively.	Theory	AC5.4b	Page 64			Unit 6 Unit 2
	Session 2 – Lesson duration 1–1¼ hrs						
22	Carry out weekly soil analysis and weather watch and record findings. Refer to week 2 for details (spring survey).	Practical & Theory	AC1.3a/b AC1.4a/b AC4.2a/b	Pages 18–19 Page 52	IE2 SM1 SM3	E M ICT	Unit 2
	Session 3 – Lesson duration 1–1¼ hrs						
22	Carry out weekly soil analysis and weather watch and record findings. Refer to week 1 for detail (spring survey).	Practical & Theory	AC1.3a/b	Pages 18–19	IE2	E	Unit 2

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
	End of spring survey. Results are to be combined with autumn survey results for Unit 1 assessment in week 24.		AC1.4a/b AC4.2a/b	Page 52	SM1 SM3	M ICT	
	Session 1 – Lesson duration 1–1¼ hrs						
23	Explain how to prepare an oral presentation and re-cap on displaying data/statistics (<i>see weeks 2 and 3</i>) in preparation for assessment of Unit 1 in week 24 and Unit 4 assessment in week 28.	Theory	AC1.4c	Page 19	RL6	E M ICT	Unit 2
	Session 2 – Lesson duration 1–1¼ hrs						
23	Explain how to prepare an oral presentation in preparation for assessment of Unit 1 in week 24 and Unit 4 assessment in week 28.	Theory	AC1.4c	Page 19	RL6	E M ICT	Unit 2
	Session 3 – Lesson duration 1–1¼ hrs						
23	Demonstrate giving a PowerPoint presentation in preparation for assessment of Unit 1 in week 24 and Unit 4 assessment in week 28.	Practical	AC1.4c			ICT	Unit 2
	Session 1 – Lesson duration 1–1¼ hrs						
24	Assessment Unit 1 – Preparation of report Learners refer to autumn and spring soil/weather surveys. <i>Research extra material by referring to books, CDs, DVDs and websites as listed on pages 48.</i>	Theory	Unit 1	Pages 17–19	1E4 IE6 RL5 EP3	E M ICT	Unit 2
	Session 2 – Lesson duration 1–1¼ hrs						
24	Assessment Unit 1 – Preparation of report <i>continued</i>	Theory	Unit 1	Pages 17–19	1E4	E	Unit 2

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
					IE6 RL5 EP3	M ICT	
	Session 3 – Lesson duration 1–1¼ hrs						
24	Assessment Unit 1 – Presentation of report	Practical	Unit 1	Page 17–19	1E4 IE6 RL5 EP3	E M ICT	Unit 2
	Session 1 – Lesson duration 1–1¼ hrs						
25	Practical activity for group to assess a habitat's benefit to environmental and land-based businesses and enterprises, by producing a mini case study based on the habitat at your place of study.	Theory	AC5.4c	Page 64	IE2 TW1		Unit 2
	Session 2 – Lesson duration 1–1¼ hrs						
25	Session 1 <i>continued</i>	Theory	AC5.4c	Page 64	IE2 TW1		Unit 2
	Session 3 – Lesson duration 1–1¼ hrs						
25	Group discussion/debate on findings from sessions 1 and 2.	Practical	AC5.4c	Page 64	IE5 CT1/2/ 4 TW1 SM7		Unit 2

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
	Session 1 – Lesson duration 1–1¼ hrs						
26	Learners to work in pairs and prepare questions with answers based on findings from activity in week 25.	Theory	AC5.4c	Page 64	TW1 IE1		Unit 2
	Session 2 – Lesson duration 1–1¼ hrs						
26	Session 1 <i>continued</i>	Theory & Practical	AC5.4c	Page 64	TW1 IE1		Unit 2
	Session 3 – Lesson duration 1–1¼ hrs						
26	Quiz – enterprise activities Learners to exchange and complete quizzes.	Theory & Practical	AC5.4c	Page 64	TW1 SM7		Unit 2
	Session 1 – Lesson duration 1–1¼ hrs						
27	Explain a range of enterprises not already identified and explore how geography may help to identify factors that influence the location and distribution of plants and animals. Use a PowerPoint presentation and the internet interactively.	Theory	AC5.4c	Page 64			Unit 2
	Session 2 – Lesson duration 1–1¼ hrs						
27	Explain a range of enterprises not already identified and explore plants and animals that exist there and assess how the flora and fauna determine the characteristics of the landscape and the uses to which these areas are put by society. Use a PowerPoint presentation and the internet interactively.	Theory	AC5.4c	Page 64			Unit 2
	Session 3 – Lesson duration 1–1¼ hrs						

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
27	Assess a habitat's benefit to environmental and land-based business and enterprise activity. <i>For research use books and websites listed on pages 70–71.</i>	Practical	AC5.4c	Page 64			Unit 2
Session 1 – Lesson duration 1–1¼ hrs							
28	Assessment (3 hours) Preparation and oral presentations – Working with plants and animals Learners to refer to working logs to present a report on the physical and environmental factors that affect the growth and reproduction of plants and animals in their natural or managed environments.	Theory	Unit 4	Page 54	RL5/6 IE6	E M ICT	
Session 2 – Lesson duration 1–1¼ hrs							
28	Assessment <i>continued</i>	Theory	Unit 4	Page 54	RL5/6 IE6	E M ICT	
Session 3 – Lesson duration 1–1¼ hrs							
28	Assessment <i>continued</i> Oral presentations of reports	Practical	Unit 4	Page 54	RL5/6 IE6 EP3	E M ICT	
Session 1 – Lesson duration 1–1¼ hrs							
29	Visit to a professional organisation to review their resources and gain data or information on enterprise activity. Learners to gain permission to film premises, take photographs and collect leaflets.	Practical & Theory	AC5.4c	Page 64	TW1 IE2		Unit 2

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
	Session 2 – Lesson duration 1–1¼ hrs						
29	Visit <i>continued</i>	Theory & Practical	AC5.4c	Page 64	TW1 IE2		Unit 2
	Session 3 – Lesson duration 1–1¼ hrs						
29	As a group, learners carry out a mind-mapping exercise to assess the findings from their visit.	Theory & Practical	AC5.4c	Page 64	RL5 IE6		Unit 2
	Session 1 – Lesson duration 1–1¼ hrs						
30	Visit to a professional organisation to review their guidance on plants and animals. Learners to gain permission to film premises, take photographs and collect leaflets.	Theory & Practical	AC5.4c	Page 64	TW1 IE2		Unit 2
	Session 2 – Lesson duration 1–1¼ hrs						
30	Visit <i>continued</i>	Theory & Practical	AC5.4c	Page 64	TW1 IE2		Unit 2
	Session 3 – Lesson duration 1–1¼ hrs						
30	As a group, learners carry out a mind-mapping exercise to assess the findings from their visit.	Theory & Practical	AC5.4c	Page 64	RL5 IE6		Unit 2
	Session 1 – Lesson duration 1–1¼ hrs						
31	Unit 5 Revision	Theory	Unit 5	Page 62			
	Session 2 – Lesson duration 1–1¼ hrs						
31	Unit 5 Revision	Theory	Unit 5	Page 62	TW3		

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
	Session 3 – Lesson duration 1–1¼ hrs						
31	Unit 5 Revision	Theory	Unit 5	Page 62	TW3		
	Session 1 – Lesson duration 1–1¼ hrs						
32	Unit 5 Exam – Preparation	Theory	Unit 5	Page 62	TW3		
	Session 2 – Lesson duration 1–1¼ hrs						
32	Exam Unit 5 – 1 hour exam	Theory	Unit 5	Page 62	TW3		
	Session 3 – Lesson duration 1–1¼ hrs						
32	Quiz – Learners match pictures to written identification, including common wild and cultivated plants, eg trees, shrubs, bushes, annuals and perennials, herbaceous ornamental plants, herbs and spices and commercial food plants (eg cereals, vegetables, fruit).	Theory & Practical	AC4.4a	Page 53	TW1 TW3 TW5		
	Session 1 – Lesson duration 1–1¼ hrs						
33	Gather Year 1 research and reports that provide information that cross-references to Units 2, 3 and 6 in Year 2.	Theory	ALL	Units 1/4/5	IE2		
	Session 2 – Lesson duration 1–1¼ hrs						
33	Identify research and reports that can be used effectively for preparation of Year 2 assessments/assignments.	Theory	ALL	Units 1/4/5	IE2		
	Session 3 – Lesson duration 1–1¼ hrs						
33	Quiz – Common wild and domesticated animals Reptiles, amphibians, fish, birds, mammals, insects	Theory & Practical	AC1.1	Page 17	TW1 TW3 TW5		

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
	Session 1 – Lesson duration 1–1¼ hrs						
34	Gather Year 1 research and reports that provide information that cross-references to Units 2, 3 and 6 in Year 2.	Theory	ALL	Units 1/4/5	IE2		
	Session 2 – Lesson duration 1–1¼ hrs						
34	Identify research and reports that can be used effectively for preparation of Year 2 assessments/assignments.	Theory	ALL	Units 1/4/5	CT1 CT3 R12 R15		
	Session 3 – Lesson duration 1–1¼ hrs						
34	Quiz – Identify a wide range of habitats Woodland, hedgerow, mountain, grassland, heath land, urban, coastal, salty water, fresh water	Theory & Practical	AC1.1	Page 17	TW1 TW3 TW5		
	Session 1 – Lesson duration 1–1¼ hrs						
35	Visit – Reference sustainability	Practical	Unit 6	Page 72	CT3 IE5		Unit 6
	Session 2 – Lesson duration 1–1¼ hrs						
35	Visit – Reference sustainability	Practical	Unit 6	Page 72	CT3 IE5		Unit 6
	Session 3 – Lesson duration 1–1¼ hrs						
35	Introduction to Year 2 programme of study (Units 2, 3 and 6).		Unit 6	Page 72	CT3		Unit 6

Week of delivery	Activities, assignments, assessments and exams	Method of delivery	LO and AC	Refer to Specification for scope	PLTS	FS	Cross-reference of generic level descriptors
					IE5		