

Year: 11

Subject: Agriculture

Unit numbers	Focus	Learning Outcomes	Parental Support	Independent Learning
Unit 112841- Health and safety on a farm.	Students to have a basic understanding of Health and Safety on a farm, and be able to recognise any hazards or dangers when working with equipment or animals.	<ul style="list-style-type: none">- To be able to understand the appropriate personal protective equipment and clothing for a given task.- To understand the different types of hazard signs that can be found on a farm.- Identify possible dangers associated with hazards and working with animals- Learn the importance of hand washing after being on a farm and handling animals.	Talk with students and discuss what they have learnt.	https://youtu.be/xRU2x47Rmco
Unit 119881- Safe use of a hoe.	Students to show that they can understand how to use a hoe correctly and safely when working alone or around others, and be able to store away safely when not in used.	<ul style="list-style-type: none">- To have a better understanding of using a garden tool correctly.- To be able to show an awareness of safety when working alongside of others and understand the correct way to store tools when not in used.	Discussions, watch YouTube video clip together.	https://youtu.be/UHaKaB28GCY
Unit 119214- Weeding by hand.	Students to be able to look around the garden and identify different weeds and the process of how to remove and dispose of them correctly.	<ul style="list-style-type: none">- To be able to identify at least two types of weeds, loosen the soil around them and remove them correctly before disposing of them in the correct manner, also making sure that the work area is left tidy.	Discussions/ watch video clip	https://youtu.be/kcibs wxqncI
Unit 120231- Introduction to gardening	Students to have a general knowledge in the correct way to plant seeds/seedlings according to instructions, and be able to maintain their plot in the hope of producing a good crop.	<ul style="list-style-type: none">- Prepare the land for planting seeds and plants- Plant seeds and plants according to instructions- Maintain the plot over a growing season.- Identify weeds which appear and remove them.	Discussions/ watch video clip.	https://youtu.be/BO8yuSTc3fo

Unit 117357- Plants	Students to be able to identify common wild and garden plants and be able to name the parts of the plant understanding about pollination and the different ways seeds are dispersed.	<ul style="list-style-type: none"> - Name common weed and garden plants, to understand the difference in both. - To be able to label the different parts of the plants and their functions. - Have an understanding of what is pollination and how seeds are disperse. e.g. wind, animals fur, people etc. 	Discussions/ watch video clip/quiz	https://youtu.be/chDm0wzOZS8
Unit 118009- Basic cell structure	Students to understand cells, the structure of both animal and plant cells and their functions.	<ul style="list-style-type: none"> - Learn about how living things are made up of cells. - The structure of an animal cell i.e. nucleus, cytoplasm and a cell membrane. - The structure of a plant cell, i.e. nucleus, cytoplasm, cell membrane, cell wall and chloroplasts. - The function of at least two different structures present in animal cells. <p>The functions of at least two different structures only present in plant cells.</p>	Discussions/ Watch video clip./quiz	https://youtu.be/TVxtlfUwYQ
Unit 70358-Introduction to Photosynthesis	Students to have an understanding of what is photosynthesis and its role within plants, learning the technical terms such as xylem and phloem and their functions in a plant.	<ul style="list-style-type: none"> - Identify the leaf, stem, root, phloem and xylem on a plant diagram. - Recall the function of these plant parts. - Recall the word equation for photosynthesis. - Design a labelled poster illustrating the process of photosynthesis. 	Watch video clip/ test knowledge	https://www.youtube.com/watch?v=D1Ymc311XS8&pp=ygUpaW50cm9kdWN0aW9uIHRvIHBob3Rvc3lu dGhlc2lzlHZpZGVvI GNsaXA%3D
Unit- 111534- Basic introduction to Horticulture	Students to understand the best soil for growing plants, the life cycle of a plant and to put what they have learnt into the practical. Also, monitoring the growth until harvest, making sure that the correct PPE is worn at all times and adhering to the safety procedures.	<ul style="list-style-type: none"> - Prepare soil for planting - Weed an area of a garden or growing space - Sow at least one type of seed. - Pot up a plant or seedling - Water plants appropriately. - Harvest at least two types of crops. - Add compost to soil. - Shown knowledge of wearing suitable clothing and footwear for gardening, using appropriate safety procedures for using garden tools. - Understand the life cycle of a plant 	Watch video clip/ Discussions	https://www.youtube.com/watch?v=TbdLJd8i1oc&pp=ygUtYmFzaWMgaW50cm9kdWN0aW9uIHRvIGhv cnRpY3VsdHVyZSB 2aWRlbyBjbGw

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Unit- 110850 Gardening tools: Preparing a plot of land or raised bed with assistance.	Students to understand how to work safely when in a practical setting, how to prepare a plot of land or a raised bed, and understand why some plants need a raised bed and how to disposed of weeds correctly to avoid further spread.	<ul style="list-style-type: none"> - Remove all the weeds from a plot of land or raised bed by hand. - Disposed of the removed weeds appropriately. - Use a spade or trowel to dig over and break up the soil. - Use a rake to level the soil. - Use a watering can to water the prepared area. <p>Work safely in a horticulture environment.</p>	Watch video clip	https://youtu.be/v0Ykko https://youtu.be/WmOA_qIAiPA_vCWNI
Unit 70865- Growing vegetables.	<ul style="list-style-type: none"> - Students to gain a better understanding of how seeds should be sown and the different Medias that can be used to promote this. 	<ul style="list-style-type: none"> - Select appropriate containers and media for growing a given selection of seeds, seedlings and bulbs or tubers. - Sow given seeds, with assistance if necessary. - Plant up given seedlings, with assistance if necessary. - Plant up a given bulb or tuber, with assistance if necessary. <p>Assist with ongoing plant care, including watering, weeding and pest control.</p>	Watch video clips, reflect back on prior learning.	https://youtu.be/vAmglTjpDfw
Unit 118535- Parts of a flower and their structure and functions	<ul style="list-style-type: none"> - Students to use prior knowledge and be able to label and identify the different parts of a flower and their functions. 	<ul style="list-style-type: none"> - Shown knowledge of the four main structures of a flower, i.e. the sepals, petals, stamen and carpel. - Name and label parts of a flower including petal, stigma, style, pollen tube, ovary, anther and filament. - Name two functions of a sepal. - Name two functions of a petal. - Name two functions of a stamen. - Name two functions of a carpel. 	Watch video clip/ quiz	https://www.youtube.com/watch?v=GkzFimUJdD8&pp=ygUocGFydHMgb2YgYSBmbG93ZXlqc3RydWV0dXJlIGFuZCBmdW5jdGlvbG%3D%3D
Unit 117357- Biology (unit 7): Plants	Students to understand and identify the difference between wild and garden plants, and the different	<ul style="list-style-type: none"> - Name at least two common wild and garden plants. - Name the basic parts of a plant. - Understand what is pollination 	Watch video clip/ discuss.	https://www.youtube.com/watch?v=37PPYxDVgMw&pp=ygUpZGlmZmVvZW5jZSBiZ

	ways in which seeds can be disperse Eg wind dispersal, animal dispersal.	<ul style="list-style-type: none"> - Show knowledge of at least two different methods of seed dispersal. - Plant seeds and monitor their growth over a given period. 		XR3ZWWuIHdpbGQgYW5klGdhcmRibiBwbGFudHM%3D
Unit number 113452-Plants: Parts, Functions and Growth	Students to gain knowledge in identifying that plants are a living thing, be able to comfortably identify what is needed to make plants grow and the direction in which stems and roots grow.	<ul style="list-style-type: none"> - To be able to classify plants as a living thing. - To be able to recognise that flowers make seeds and state two ways that flower seeds can be disperse. - Identify at least two things seeds need in order to grow. - To be able to understand the term germination <p>To research the direction of growth for stems and roots, e.g. up and down.</p> <p>Look through references and/ or picture books to help them identify at least two plants.</p>	Watch video clip/ discussions	https://youtu.be/18amLZ9vfG8
Unit 116012- Introduction to growing plants and vegetable.	Be able to identify what is needed for the growth of a healthy plant, and use prior knowledge when transplanting plants into a given area.	<ul style="list-style-type: none"> - Students to identify the requirements for healthy plant growth - Identify the main differences between at least three plants. - Identify the three parts of a tree. - Sow two types of edible plant seeds in containers. - Water and care for seeds over a period of time. <p>Show knowledge by naming the external parts of a flowering plant and transplanting seeds when required to a pot or garden bed.</p>	Watch video/ discussions	https://youtu.be/vAmglTjpDfw https://youtu.be/Ujif7Z7udgw

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<p>Unit number 112017- Identifying and managing invasive plant species</p>	<p>Students to gain an understanding of different types of invasive plants, what is the correct PPE to wear, and understand the different ways that invasive plants can be controlled</p>	<ul style="list-style-type: none"> - Understanding the appropriate protective clothing when dealing and managing invasive plant species. - Identify at least three types of invasive plant species in two specified areas. - Research the correct methods of management of the three identified types of invasive plant species selected, e.g. hand pulling, spraying or strimming. - Show how you would manage invasive species in a habitat over a period of time. - Evidence of how you would store the tools and protective clothing safely. 	<p>- . Encourage students to watch video clip.</p>	<p>https://youtu.be/34BXORgdhno</p>
<p>Unit number- 108456- Soil and decomposition</p>	<p>Students to gain an understanding of how soil is formed, what is beneficial to plants in order for them to grow healthy, and acquire a better understanding of some of the terminology words use to widen their knowledge.</p>	<ul style="list-style-type: none"> - Students to demonstrate the ability to: - Compare two contrasting soil samples from different locations. - Create a mini composter (with photographs) - Identify three parts of an earthworm e.g. anterior, segment and clitellum. <p>Students to show knowledge of:</p> <ul style="list-style-type: none"> - The different ways in which soil is beneficial to plants and animals. <p>Look at ways in which compost is beneficial for growing plants</p> <ul style="list-style-type: none"> - Understand the meaning of decomposer and tiller. - Ways in which worms aid plant life. - What castings are, and how they are important for plants. - Students to understand how soil is formed and what decompositions is, and how it works. 		
<p>Unit number-118710 Growing food Outdoors</p>				

<p>Unit number- Understanding the laws of keeping livestock</p>	<p>Students to gain a better understanding of how grounds need to be prepared for sowing, how certain crops need to be plant and the process of harvesting the vegetables.</p>	<ul style="list-style-type: none"> - Students to show knowledge on how to prepare the ground for seed sowing, including weeding, digging, forking in organic matter, consolidating, raking and top dressing. - How to chit and plant potatoes. - How to plant onion sets out. - How to cultivate crops, e.g. watering, staking and netting. - When to harvest potatoes and onions. - Identify at least three different organic gardening, e.g. hoeing. - Identify three different gardening techniques. - Identify three common pest affecting crops outdoors. - Students to research and record three different crops grown outdoors in the UK. - Identify 3 different herb plants grown outdoors. - Identify at least three fruit plants grown outdoors. - Identify 3 vegetable crops grown outdoors. 	<p>-</p>	<p>https://www.youtube.com/watch?v=ZNU9AB9yV88</p>
<p>Unit number- LE4548- Small machine use and</p>	<p>Students to understand the laws of keeping livestock, what is the Animal Welfare Act 2006 and why it is needed.</p>	<ul style="list-style-type: none"> - What the Animal Welfare Act 2006 is and the key reason why it is in place. - Name 3 welfare codes of practices that exists on the farm, including at least two important points for each. - Research and write what the 'five freedoms' of animal welfare are where a livestock owner would get the CPH, flock or herd numbers from. - Which animals require flock or herd numbers. - The key paperwork that is needed when buying or selling animals. 		<p>https://www.youtube.com/watch?v=ff5MTAVQROo</p>

<p>maintenance in conservation</p>	<p>Students to gain an understanding of using small machinery, the correct PPE that should be worn, learning the hazards that can occur, understanding the manufacturer's instructions and how to maintain equipment to maximize the working life.</p>	<p>Demonstrate the ability to: Recognise and name at least three small petrol driven machines and state the use of each in conservation.</p> <ul style="list-style-type: none"> - Select and wear the correct personal protective equipment when using and maintaining small petrol driven machines. - Carry out the pre-start checks and adjustments on at least two of the small petrol driven machines. Check the immediate work area for hazards and take appropriate action is necessary. - Use at least two small petrol driven machines correctly and safely, eg a petrol driven lawn mower. - Leave the selected machines safe after use and in a suitable condition for future use. - Select the necessary hand tools and materials needed for any necessary maintenance. - Use hand tools to carry out necessary maintenance on a least two small petrol driven machines in accordance with the manufacturer's instructions. - Show how they can work safely in a practical environment. - Shown knowledge of all controls on at least three of the small petrol driven machines. - Learn how to deal with at least two hazards that may be encountered during the operation of machinery, e.g., changes in weather, ground conditions. - To understand that the efficiency of the machines performance can be maintained through appropriate handling. 		
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<p>Unit number- 118511- Allotments and greenhouses: Growing flowers and vegetables.</p>		<ul style="list-style-type: none"> - Give at least two reasons why it is important to maintain the machines, eg to maximize the working life of the equipment. - https://www.youtube.com/watch?v=Hx26qDejNeQ - Record your own limits of responsibility in relation to the use and maintenance of equipment. - Name at least two legal requirements regarding small machinery, eg licenses. - What are the appropriate conditions and location of the machine on completion of any maintenance procedures? - Learn the importance of following manufacturers and organizational instructions and at least two potential consequences and risks of not doing so. 		
<p>Unit number- 112477- Life on the allotment</p>	<p>Students to continue to use prior knowledge to carry out the process needed from preparation of soil to harvesting of crops, also showing how they can follow the correct safety procedures when doing so.</p>	<p>Show knowledge of:</p> <ul style="list-style-type: none"> - The key factors and requirements needed for the successful propagation and establishments of at least two plants they are growing. - Demonstrate the ability to: - Prepare a bed for planting, including thoroughly weeding an area of soil. - Follow instructions to sow given seeds to the correct depth and density, both directly outside into the bed and in greenhouse trays. - Maintain the seedlings, eg by watering, until they become visible plants. - Use a good planting process to transfer and plant out the plants when they are ready to go outside. - Maintain the plants with watering, weeding and pricking out seedlings until the plants are ready to harvest. - Harvest the plants in a careful manner to produce a successful crop. - Use garden tools safely to dig, level, weed and rake. - Working safely in a team, in a greenhouse and at an allotment. 		<p>https://www.youtube.com/watch?v=Rk_-CZajZik</p> <p>https://www.youtube.com/shorts/OpvdAIFtY2k</p> <p>https://www.youtube.com/watch?v=33jYNjO9K7Y</p>

Unit 119420-Companion Farming		<ul style="list-style-type: none"> - Working as a team to plan a planting scheme for vegetables and a flower cutting garden. 		
		<p>Show knowledge of:</p> <ul style="list-style-type: none"> - At least 3 rules of an allotment - Eight garden tools and their purposes. - At least three suitable items of clothing for gardening outside. - At least three methods of removing weeds. - Six materials that can be used to make compost. - Seven different types of garden pests. - Five beneficial creatures in and around the allotment. - Five common types of weeds. - Eight types of herbs - Two things a plant needs to grow from a seed to a fully- grown plant. - What compost is used for? - What fertilizer is used for? - What pesticide is used for? - Name at least one benefit of a planting rotation scheme. - Use garden tools safely. - Prepare an area of soil for planting - Plant at least 2 types of seed or seedlings - Water the seeds, seedlings and plants - Working on the allotment. 		
		<p>Show knowledge of:</p> <ul style="list-style-type: none"> - What monoculture is and a typical monoculture crop growth in the UK. - What 'the three sisters' traditional farming methods is. - At least three crops that can be grown together using companion farming in the UK. <p>Demonstrate the ability to:</p> <p>Calculate the amount of fertilizer a farmer would need in a monoculture field depleted nutrients, based on the size of the field and the type of crop planted.</p> <ul style="list-style-type: none"> - Calculate the amount of time a monoculture crop needs to grow and the amount of nutrients it removes from the soil, in order to plan a crop rotation schedule for the next planning. 		https://www.youtube.com/watch?v=-NLPmuXCzFY

		- Calculate the amount of crops that could be planted in the same field, using the 'three sisters' method of companion planting, based on the spacing each of the plants needs to grow properly.		
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	Focus	Summary	Learning Outcomes	Parental Support	Independant Learning
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