

KS4 Grow It

RRS Articles: This unit of work is linked **Article 6** of the UN Convention on the Rights of the Child.

"I should be supported to live and grow."

RRS Articles: This unit of work is linked **Article 29** of the UN Convention on the Rights of the Child.

"I have the right to an education which develops my personality, respect for others' rights and the environment."

Subject curriculum intent:	The purpose of Grow It is to develop the skills, confidence, independence and creativity through practical lessons. The pupils will learn about recycling and upcycling to help support insects and wildlife, how to sow seeds and grow plants and how to maintain a garden area. Pupils will be able to see the process seeds go through to grow a variety of plants. Lessons are structured so they are practical to equip students with the skills they can use in a garden environment and they promote participation and teamwork encouraging students to work co-operatively.		
End of KS3 intent/outcome	End of KS4 intent/outcome	End of KS5 intent/outcome	
In KS3 pupils learn about their local environment. Plants e.g. garden or park, herbs. Explore environment through cross-curricular. Basic gardening skills. Seed sowing, watering, weeding. Seasons - cross-curricular maths. Composting.	Broaden knowledge of their environment both locally and globally. Learn more around environment issues and sustainability. Expand basic skills. On site allotment management.	Have a good knowledge of sustainability and gardening skills. Use and apply skills by managing offsite ks5 allotment.	
Intent for this topic:	Reduce, Reuse, Recycle -investigate communal waste systems at allotment site. -contribute to communal litter picking. -sort waste & identify reusable materials. -design and make water systems and plant pots from recycled materials for use in allotment space. - upcycling & design tasks - explore uses of recycled plastics - sow seeds for year round growth and harvest Sowing - create and keep records, calendars to monitor growth. - use technology to share information of sown seeds and plant care. -sow successional seeds and care for growing plants. -learn what a plant needs to survive and explore other ways of growing for example use of hydroponics.		

	Plant care -understand the needs of plant varieties and can implement care needs, for example build supporting structures, successful positioning of planting, disease prevention. - build 'plant profiles' to provide care information for future classes/ share with other Key stages. - maintain areas and manage growth through regular attendance & completion of tasks related to consistent plant care, such as regular weed identification and management. -sow seeds			
Core vocabulary needed for this subject/topic:	Recycle, re-use, reduce, waste, Earth, help, sow, litter, upcycle, waste, material, design, plan, make, evaluate, plastic, sowing, seeds,			
Vocabulary pupils will have accessed in other topics or subject areas:	Garden, grow, plants, fork, trowel, spade, plant pot, watering can,			
Key vocabulary taught within this topic:	Environment, positive, negative, world, global warming, pollution, recycling, energy, waste, survey, tally chart, eco-friendly, report, results, conclusion.			
Prior knowledge: what pupils may already have studied				
Key stage	Subject	Topic title	Term/year taught	Content/What might pupils already know?
KS3	DT Grow it	Soil, seeds an life cycles and food.	(2022-2023)	Soil - ground based -harvesting -composting -Mulches -Soil tests -Preparing beds for next season Seeds & Life Cycles -Life cycle -environment -what a plant needs -time for growing -calendar -conditions Food - recognising plants as food -Safe and unsafe plants to eat

				-Early harvest -Links to cooking -Identifying plants e.g. weed from plant, different plants, eating -Watering & care.
Links to other subjects: PHSC, Science, Religion, English, Cook it It, PE. English- reading, key words and SPAG. Maths- numeracy, measurements. Cook it- how to cook food grown, Grow It- growing and harvesting food. Science- food and nutrition, Religion - dietary requirements for religious beliefs. Geography and history- countries where food is harvested, history of plants, vegetables, gardening, gardening tools. PE- active healthy lifestyles.				

	<u>OU P5-6</u>	<u>OU P7-8</u>	<u>OU step 1</u>	<u>OU Steps 2-3</u>
Theme-Safety				
<u>Subject specific knowledge</u>	Knows where hands need to be washed. Knows of some dangers in the garden i.e. tools not stored correctly, rubbish on paths, thorns on plants. Knows that gloves go on hands before gardening. Knows that gardening tools are stored in a specific place.	Knows where hands are washed and what is needed to wash hands i.e. soap, water, and paper towels. Knows some dangers i.e. sharp tools, water spillages, rubbish, thorns, tools carried downwards. Knows that gloves should be worn before gardening. Knows that tools need to be stored safely.	Understand why we need to wash our hands when gardening and can identify some reasons why. Knows and understands dangers and safety rules in the garden Knows why gloves should be worn before gardening. Knows why gardening tools must be stored safely.	Understand why we need to wash our hands and can give relevant examples of why we wash hands and the risks if they are not washed properly when gardening. Understands dangers in the garden and preventative measures to minimise the dangers. Understands why gardening gloves must be worn and dangers of not wearing them. Can explain why gardening tools must be stored safely.

<u>Subject specific skills</u>	<p>Is able to wash hands with verbal prompts for each step i.e. wet hands, put soap on, wash hands, dry hands.</p> <p>Is able to follow key safety rules when modelled.</p> <p>Is able to put gardening tools back to the correct place with verbal support.</p> <p>Is able to pick up gardening gloves and attempt to put them on.</p>	<p>Is able to wash hands once directed with some verbal prompts.</p> <p>Is able to follow key safety rules when given verbal instructions.</p> <p>Is able to locate and put away key gardening tools away when prompted.</p> <p>Is able to stay away from dangers in the allotment.</p> <p>Is able to put on gardening gloves.</p>	<p>Is able to wash hands safely and hygienically.</p> <p>Is able to follow basic safety rules when gardening.</p> <p>Is able to locate and store gardening tools safely.</p> <p>Is able to use the correct equipment to ensure safety.</p> <p>Is able to stay away from dangers in the garden and work safely minimising the risk of dangers i.e. storing tools correctly when not in use.</p>	<p>Is able to demonstrate excellent hygiene throughout lessons.</p> <p>Is able to follow and understand safety rules when gardening.</p> <p>Is able to independently locate, and store gardening tools safely.</p> <p>Is able to independently use the correct equipment to ensure safety i.e. gloves, bin, and shovel.</p> <p>Is able to independently stay away from dangers and work safely minimising the risks of dangers and explain the reasons why.</p>
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Theme- garden skills

<u>Subject specific knowledge</u>	<p>Knows key parts of a garden / allotment i.e. soil, plants, water, path.</p> <p>Knows a familiar piece of gardening equipment.</p> <p>Knows what a plant needs to grow using a choice of 3 pictorial answers.</p>	<p>From a choice can identify the correct equipment needed to complete a familiar task.</p> <p>Knows that a seed needs to be planted in soil and that a plant needs water and sunlight to grow.</p>	<p>Knows equipment needed to complete a task and discuss the steps to use.</p> <p>Knows how a seed needs to be planted and can identify what plants need to grow.</p> <p>Knows the name of parts of a flower: seed, flower, leaf, stem, and root.</p>	<p>Understand what equipment is needed to complete a specific gardening task and discuss the steps to use.</p> <p>Can explain how to plant a seed and what a plant needs to grow.</p> <p>Knows a range of insects and animals live in a garden / allotment and explain why they are good for a garden / allotment.</p>
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	<p>Knows at least two parts of a flower.</p> <p>Knows that insets and animals can live in the garden / allotment.</p> <p>Can identify tidy and untidy beds.</p>	<p>Knows the name some of the key parts of a flower; flower, leaf.</p> <p>Knows the common animals and insects that live in a garden / allotment.</p> <p>Knows that beds need to be looked after by picking litter and watering.</p>	<p>Knows insects and animals that live in a garden / allotment and identify some reasons why they are good for a garden / allotment.</p> <p>Knows how to maintain a bed i.e. pick litter, leaves, water, trowl soil, weed.</p> <p>Knows how animal and insects houses help i.e. keeps animals safe.</p>	<p>Knows the different parts of a flower using the correct terminology and explain the uses.</p> <p>Can understand why beds have to be maintained and explain the steps for doing so.</p> <p>Can understand the negative effects of litter on the environment.</p> <p>Understand the positive effects of having insect / animal houses for the environment.</p>
<u>Subject specific skills</u>	<p>Is able to use a piece of gardening equipment after demonstration and with verbal support.</p> <p>Is able to plant a seed after demonstration and using symbolised steps to support.</p> <p>Is able to follow a simple symbolised step to help build an insect / animal house.</p> <p>Is able to move soil to help fill a raised bed.</p>	<p>Is able to use gardening equipment after a staff demonstration.</p> <p>Is able to plant seeds after a demonstration by staff identifying the correct tool needed.</p> <p>Is able to follow a 2 step symbolised instructions to build an insect / animal house.</p> <p>Is able to identify what a plant needs to grow from a choice of answers.</p>	<p>Is able to identify and use gardening equipment safely.</p> <p>Is able to plant seeds using tools and ensure plants have the correct resources to grow i.e. water.</p> <p>Is able to build an insect / animal house following 4 step written instructions.</p> <p>Is able to maintain beds using the correct equipment.</p> <p>Is able to fill a watering jug to a specified ml in increments of 100ml.</p>	<p>Is able to confidently identify and use a range of gardening equipment safely.</p> <p>Is able to plant seeds using the correct tools and ensure plants have the necessary resources to grow i.e. water, planted in sunlight.</p> <p>Is able to follow 6 step written instructions to build an insect / animal house.</p> <p>Is able to maintain beds to a high standard using the correct equipment independently.</p> <p>Is able to lead a small team to build a raised bed and fill with compost.</p>

	Is able to pour water on to the soil using a watering jug with some staff support.	Is able to follow verbal instructions to help maintain and build beds. Is able to fill a watering jug up to the top.		Is able to accurately fill a watering jug to a specified ml in increments of 50ml i.e. 550ml, 1500ml,
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Theme-Recycling

<u>Subject specific knowledge</u>	<p>Can identify rubbish in the environment.</p> <p>Knows that rubbish is put into bins.</p>	<p>Knows that rubbish is bad for the environment.</p> <p>Knows that rubbish is put into bins and can be sorted into different bins.</p> <p>Knows that recycle means reuse again.</p>	<p>Identifies what recycle and upcycle mean and can identify some ways it can help the environment.</p> <p>Can identify issues rubbish causes on the environment i.e. injuries animals.</p> <p>Knows how to reduce waste.</p> <p>Knows that recycling centres sort materials for reusing.</p>	<p>Knows that a range of products can be recycled and reused.</p> <p>Understand what recycle and upcycle mean and can explain why it is important to recycle and upcycle.</p> <p>Knows how to reduce waste and can explain the advantages.</p> <p>Knows that recycling centres help sort and separate into different types of materials by hand or machine (or both) before being sent to manufacturers who make it into new products.</p> <p>Is able to explain the effects human activity has on the earth e.g. litter, plastic pollution and the effects it has on the environment.</p>
<u>Subject specific skills</u>	Is able to pick litter after demonstration	Is able to recycle materials into clearly	Is able to pick litter using the correct equipment.	Is able to recycle materials correctly and suggest a range of ways an item can be upcycled.

	<p>when given the correct equipment.</p> <p>Is able to correctly recycle materials into clearly symbolised containers using a choice of two.</p>	<p>symbolised containers.</p> <p>Is able to pick litter when given the correct equipment.</p>	<p>Is able to recycle materials and suggest a way an item can be upcycled.</p>	<p>Is able to pick litter using the correct equipment and disposing of appropriately i.e. compost, recycle, bin.</p> <p>Is able to upcycle using a range of</p>
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<u>Personal development</u>	<p><u>Problem solving-</u> Linked to resolving any issues encountered, finding a way to solve the problem when gardening. .</p> <p><u>Communication skills-</u> Using full sentences/signs appropriate, to communicate instructions and ideas, listening and responding appropriately to other peoples ideas.</p> <p><u>Self-belief-</u> Never giving up if unable to resolve the issues, continue to ask, listen and try different solutions.</p> <p><u>Self-management-</u> Linked to managing equipment safely and managing behaviours.</p> <p><u>Team-work-</u> Linked to working in small groups and realising a goal as a group, cooperating with a group and working together effectively.</p>			

Suggested activities

P5-L3

Recycling centre visit
 Old clothes upcycle
 Make range of reusable resources out of waste products: vases, storage can, bunting..
 Planting seeds.
 Maintaining beds.
 Watering flowers.
 Picking the harvest.
 Washing picked vegetables.
 Investigating the herbs in the sensory garden.
 Sampling a herb a week through cookery, tasting raw (where possible) and in food/teas.
 Dead heading flowers to encourage new buds.
 Maintaining vegetables patches,

Researching vegetables and the pests they attract. Research and test natural remedies to eradicate the pests

Rainfall measurements

Collecting and identifying bugs.

Worm counts

Making bird feed.

Build a bug house.

Scrap book of the wildlife found in the school playground.

Make a mini wormery using a large glass jar.

Building birdhouses.

Attracting the right bugs to the vegetable patch. Researching which plants will attract bees & relevant bugs to help pollinate and spread seeds. Sowing and planting these out.

Calculating plant numbers from seed packs and keeping a log of the info. How many were sown? How many germinated? How many were pricked out? How many healthy plants survived outside?

Measuring and marking appropriate distances when planting out.

Creating a calendar of time sown and expected harvests.

Breaking down original costs of seeds, pots etc & how much we would sell our vegetables for. Create a spreadsheet.

Online resources

<https://www.upcyclethat.com/>

<https://www.recyclenow.com/how-to-recycle/what-happens-to-my-recycling>

<https://littlebinsforlittlehands.com/bee-house/>

<https://www.gardenersworld.com/how-to-grow-plants/10-gardening-projects-for-kids/>

<https://www.rhs.org.uk/advice/health-and-wellbeing/children-getting-them-interested-in-gardening>gardeningsforkids.co.uk/

<https://www.saga.co.uk/magazine/home-garden/gardening/advice-tips/reusing-single-use-plastic-in-the-garden>

<https://www.recyclenow.com/local-recycling>

<https://www.pinterest.co.uk/pin/235876099206963324/>

<https://handsonaswegrow.com/free-recycling-activities-kids/>

Evidencing Work

Practical evidence sheets, research work, gardening work. All picture and teacher evidence needs to be formatted within the ASDAN booklet.

