## KS4 Grow It

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.

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:

We want our pupils to develop an increased awareness of the environment, sustainability and global issues related to food production. Through this knowledge pupils will develop a sense of responsibility and understanding around personal contributions to the global community. We want pupils to be able to access a range of outdoor activities, areas and growing spaces that promote confidence and self-esteem thus promoting positive physical, emotional and healthy food choices in adulthood. Grow it will also act as a vehicle to support embedding science, literacy and numeracy skills. We want our pupils to develop the confidence to engage with community groups involved in local gardens and to have the ability to grow foods to prepare and eat at home.

### End of KS3 intent/outcome

Pupils engage with their outdoor community environments. Pupils understand that food is grown from plants. Pupils have developed basic skills around plant care such as sowing, caring for and harvesting foods. Pupils begin to recognise food waste and understand the positive effects of composting in the local environment. Pupils engage with their learning through cross curricular activities such as art, English, maths & science.

# End of KS4 intent/outcome

Pupils broaden their knowledge of their environment both locally and globally. Pupils understand the positive impact that growing food has on sustainability, health and the environment, locally and globally. Pupils develop an appreciation for the importance of food and farming across history and culture. Pupils are able to further develop and transfer skills related to gardening and school enterprise project 'From Plot to Plate'. growing their own foods through an onsite allotment. Pupils know how to use harvested foods within cookery.

### End of KS5 intent/outcome

Pupils have a good knowledge of the environmental impact of food growth across the globe. Pupils are able to apply practical skills and knowledge of food growth to a 'vocational environment' in the form of an offsite community allotment 'The Plot'. Pupils understand how to harvest, prepare and cook a wide range of grown foods through collaborations with Pupils are aware of local gardening groups and community areas available to them. Pupils understand the importance of fresh food for a healthy diet and have the confidence to grow food at home.

# Intent for this topic:

The pupils will learn about the range of materials needed within an allotment. Pupils will gain knowledge around how different materials can be used to promote insects and wildlife and those materials which may hinder the environment. Pupils will learn the difference recycling and upcycling and will plan a project which benefits the environment through either upcycling or recycling tasks. Lessons are a practical structure supporting to equip students with the skills they can use in a garden environment. This also promotes participation and teamwork by encouraging students to work co-operatively.

Key vocabulary taught within this topic:	Environment, positive, negative, world, global warming, pollution, recycling, energy, waste, survey, tally chart, eco-friendly, report, results, conclusion, re-use, reduce, waste, Earth, help, sow, litter, upcycle, waste, material, design, plan, make, evaluate, plastic, sowing, seeds,					
Prior knowledge: what pupils may already have studied						
Key stage Subject		Subject	Topic title	Term/year taught	Content/What might pupils already know?	

Key stage	Subject	Topic title	Term/year taught	Content/What might pupils already know?
KS3	Grow it	Soil, life cycles, food.	Year 1 2021-2022 Year 2 2022-2023 Year 3 2023-2024	Soil – ground based Pupils will develop the skills needed to improve an area of garden and how to use a range of available space to maximise growing healthy fresh foods. Pupils will learn skills related to caring for soil, plants and the environments including how to manage plant waste and compost effectively. Pupils will also develop a sense of seasons and seasonal growth patterns. Seeds & Life Cycles Pupils will understand the life cycle of a seed and be able to experience each key step of growth. Pupils will recognise weather conditions and make assessments around needs of a plant. Pupils will learn the skills needed to recognise stages of plant growth and the care needed. Pupils will be supported to learn about and recognise their environment. Pupils will gain knowledge of tasks related to plant care. Food Pupils are able to develop an understanding of the growth of a plant from seed to harvest. Pupils are able to understand the types of plants that can be grown for the purpose of eating within their personal and local environment. Pupils will recognise a range of fruit and vegetables and be able to identify these in a meal. Pupils will gain knowledge of the importance of fresh food in a diet and learn how to harvest & prepare these. Pupils will be supported to learn about and recognise their environment. Pupils will gain knowledge of tasks related to plant care.

Links to other subjects: PHSCE, 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- climate changes, pollution, 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>	OU P7-8	<u>OU step 1</u>	<u>OU Steps 2-3</u>		
Theme-Safety						
Subject specific knowledge	Knows where hands need to be washed.  Knows of some	Knows where hands are washed and what is needed to wash hands i.e. soap, water, and	Understand why we need to wash our hands when gardening and can identify some reasons why.	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.		
	dangers in the garden i.e. tools not stored correctly, rubbish on paths, thorns on	paper towels.  Knows some dangers i.e.	Knows and understands dangers and safety rules in the garden	Understands dangers in the garden and preventative measures to minimise the		
	plants.  Knows that gloves go	sharp tools, water spillages, rubbish, thorns, tools carried	Knows why gloves should be worn before gardening.	dangers.		
	on hands before gardening.	downwards.  Knows that gloves	Knows why gardening tools must be stored safely.	Understands why gardening gloves must be worn and dangers of not wearing them.		
	Knows that gardening tools are stored in a specific place.	should be worn before gardening.  Knows that tools need to be stored safely.		Can explain why gardening tools must be stored safely.		
Subject specific skills	Is able to wash hands with verbal prompts for each step i.e. wet hands, put soap on,	Is able to wash hands once directed with some verbal prompts.	Is able to wash hands safely and hygienically.  Is able to follow basic safety	Is able to demonstrate excellent hygiene throughout lessons.  Is able to follow and understand safety		
	wash hands, dry hands.		rules when gardening.	rules when gardening.		

	Is able to follow key safety rules when modelled.  Is able to put gardening tools back to the correct place with verbal support.  Is able to pick up gardening gloves and attempt to put them on.	Is able to follow key safety rules when given verbal instructions.  Is able to locate and put away key gardening tools away when prompted.  Is able to stay away from dangers in the allotment.  Is able to put on	Is able to locate and store gardening tools safely.  Is able to use the correct equipment to ensure safety.  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.	Is able to independently locate, and store gardening tools safely.  Is able to independently use the correct equipment to ensure safety i.e. gloves, bin, and shovel.  Is able to independently stay away from dangers and work safely minimising the risks of dangers and explain the reasons why.
		gardening gloves.		
Theme- garden skills				
Subject specific knowledge	Knows key parts of a garden / allotment i.e. soil, plants, water, path.  Knows a familiar piece of gardening equipment.  Knows what a plant needs to grow using a choice of 3 pictorial answers.  Knows at least two parts of a flower.  Knows that insets and animals can live in the garden / allotment.	From a choice can identify the correct equipment needed to complete a familiar task.  Knows that a seed needs to be planted in soil and that a plant needs water and sunlight to grow.  Knows the name some of the key parts of a flower; flower, leaf.  Knows the common animals and insects that live in a garden / allotment.	Knows equipment needed to complete a task and discuss the steps to use.  Knows how a seed needs to be planted and can identify what plants need to grow.  Knows the name of parts of a flower: seed, flower, leaf, stem, and root.  Knows insects and animals that live in a garden / allotment and identify some reasons why they are good for a garden / allotment.  Knows how to maintain a bed i.e. pick litter, leaves, water, trowl soil, weed.	Understand what equipment is needed to complete a specific gardening task and discuss the steps to use.  Can explain how to plant a seed and what a plant needs to grow.  Knows a range of insects and animals live in a garden / allotment and explain why they are good for a garden / allotment.  Knows the different parts of a flower using the correct terminology and explain the uses.  Can understand why beds have to be maintained and explain the steps for doing so.  Can understand the negative effects of litter on the environment.

	Can identify tidy and untidy beds.	Knows that beds need to be looked after by picking litter and watering.	Knows how animal and insects houses help i.e. keeps animals safe.	Understand the positive effects of having insect / animal houses for the environment.		
Subject specific skills	Is able to use a piece of gardening equipment after demonstration and with verbal support.  Is able to plant a seed after demonstration and using symbolised steps to support.  Is able to follow a simple symbolised step to help build an insect / animal house.  Is able to move soil to help fill a raised bed.  Is able to pour water on to the soil using a watering jug with some staff support.	Is able to use gardening equipment after a staff demonstration.  Is able to plant seeds after a demonstration by staff identifying the correct tool needed.  Is able to follow a 2 step symbolised instructions to build an insect / animal house.  Is able to identify what a plant needs to grow from a choice of answers.  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 identify and use gardening equipment safely.  Is able to plant seeds using tools and ensure plants have the correct resources to grow i.e. water.  Is able to build an insect / animal house following 4 step written instructions.  Is able to maintain beds using the correct equipment.  Is able to fill a watering jug to a specified ml in increments of 100ml.	Is able to confidently identify and use a range of gardening equipment safely.  Is able to plant seeds using the correct tools and ensure plants have the necessary resources to grow i.e. water, planted in sunlight.  Is able to follow 6 step written instructions to build an insect / animal house.  Is able to maintain beds to a high standard using the correct equipment independently.  Is able to lead a small team to build a raised bed and fill with compost.  Is able to accurately fill a watering jug to a specified ml in increments of 50ml i.e. 550ml, 1500ml,		
Theme-Recycling						

Subject specific knowledge	Can identify rubbish in the environment.  Knows that rubbish is put into bins.	Knows that rubbish is bad for the environment.  Knows that rubbish is put into bins and can be sorted into different bins.  Knows that recycle means reuse again.	Identifies what recycle and upcycle mean and can identify some ways it can help the environment.  Can identify issues rubbish causes on the environment i.e. injuries animals.  Knows how to reduce waste.  Knows that recycling centres sort materials for reusing.	Knows that a range of products can be recycled and reused.  Understand what recycle and upcycle mean and can explain why it is important to recycle and upcycle.  Knows how to reduce waste and can explain the advantages.  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.  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.
Subject specific skills	Is able to pick litter after demonstration when given the correct equipment.  Is able to correctly recycle materials into clearly symbolised containers using a choice of two.	Is able to recycle materials into clearly symbolised containers.  Is able to pick litter when given the correct equipment.	Is able to pick litter using the correct equipment.  Is able to recycle materials and suggest a way an item can be upcycled.	Is able to recycle materials correctly and suggest a range of ways an item can be upcycled.  Is able to pick litter using the correct equipment and disposing of appropriately i.e. compost, recycle, bin.  Is able to upcycle using a range of

#### Personal development

Problem solving-

Linked to resolving any issues encountered, finding a way to solve the problem when gardening.

Communication skills-

Using full sentences/signs appropriate, to communicate instructions and ideas, listening and responding appropriately to other peoples ideas.

Self-belief-

Never giving up if unable to resolve the issues, continue to ask, listen and try different solutions.

Self-management-

Linked to managing equipment safely and managing behaviours.

Team-work-

Linked to working in small groups and realising a goal as a group, cooperating with a group and working together effectively.

### 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?

 $\label{lem:measuring and marking appropriate distances when planting out. \\$ 

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://https://www.rhs.org.uk/advice/health-and-wellbeing/children-getting-them-interested-in-gardeninggardeningforkids.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.