

KS3 -Grow it

Topic: Seeds and Life Cycles

<p>Subject curriculum intent:</p>	<p>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.</p> <p>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.</p>		
<p>End of KS3 intent/outcome</p>	<p>End of KS4 intent/outcome</p>	<p>End of KS5 intent/outcome</p>	
<p>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.</p>	<p>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 growing their own foods through an onsite allotment. Pupils know how to use harvested foods within cookery.</p>	<p>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 school enterprise project 'From Plot to Plate'. 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.</p>	
<p>Intent for this topic:</p>	<p>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.</p>		
<p>Key vocabulary taught within this topic:</p>	<p>Seeds, growing, planting, sunlight, life cycle, Soil, plants, care, water, needs, nutrients, healthy, food, harvesting, compost, biodegradable, range of gardening tools,</p>		
<p>Links to other subjects:</p>	<p>Science Cook It Life Skills</p>		

	OU P Steps 5-6	OU P Steps 7-8	OU step 1	OU Step 2	OU Step 3
<p><u>Subject specific knowledge</u></p> <p>What do pupils need to know?</p>	<p>To know what a:</p> <ul style="list-style-type: none"> -seed -bulb -plant -pot -soil -water <p>To know what soil is wet or dry</p> <p>To know when a plant has grown</p>	<p>To know a plant needs:</p> <ul style="list-style-type: none"> -water, sunlight soil <p>To know when a plant is healthy or not</p> <p>To know tools:</p> <ul style="list-style-type: none"> -trowel -Gloves -Watering can <p>To know:</p> <ul style="list-style-type: none"> -bush -Plant -tree 	<p>To know a plant will not grow if it does not have any of the following: water, sun, soil</p> <p>To know key parts of a plant:</p> <ul style="list-style-type: none"> -roots -petals -leaves -stem <p>To know it is important that seeds and bulbs (plants) need space to grow.</p>	<p>To know optimum conditions needed for seed growth.</p> <p>To know different plants need different amounts of space.</p> <p>To know the main purpose for each tool:</p> <ul style="list-style-type: none"> -Trowel -Rake -Hand fork -Sieve <p>To identify weather conditions and know when it is and is not an appropriate time to sow seeds / plant bulbs</p>	<p>To know different plants take different periods of time to grow</p> <p>To know which plants grow best in which conditions</p> <p>To know stages of plant growth</p> <p>To know seasons and connected weather</p> <p>To know which part of a plant is edible (fruit & veg)</p>
<p><u>Subject specific skills</u></p> <p>What do pupils need to be able to do?</p>	<p>Is able to locate and name a:</p> <ul style="list-style-type: none"> -seed -bulb -plant -pot -soil <p>To be able to fill a pot with soil</p> <p>To be able to embed a seed into soil</p>	<p>Is able to use choice of symbols to identify what a plant needs</p> <p>Is able to look for indicators such as growing leaves, wilting and stunted growth to identify when a plant is not healthy.</p> <p>Is able to follow 2-step instructions to plant a seed or bulb.</p>	<p>Is able to locate:</p> <ul style="list-style-type: none"> -roots -petals -leaves -stem <p>on a plant independently</p> <p>Is able to plant seeds and or bulbs outside that are evenly spaced</p> <p>Is able to use a range of hand tools confidently</p>	<p>Is able to give suggestions as to why a plant has either died or is not healthy.</p> <p>Is able to select the correct tools needed for a specific job</p> <p>Is able to suggest a type of plant that would fit into a given space (understanding plant size)</p>	<p>Is able to follow a season calendar</p> <p>Is able to plant a range of seeds/bulbs in a range of spaces</p> <p>Is able to maintain a plant's health including - knowing how it is needs to be cared for</p> <p>Is able to identify when a plant will fruit</p>

	To be able to water a plant until the soil is sodden.		Is able to follow a set of more complex instructions to sow seeds or bulbs independently, using a range of tools.		
<u>Suggested teaching activities</u>	<p>Labelling a plant/flower using symbols</p> <p>Plant a seed and with support care for it</p> <p>Plant seeds and look after them</p> <p>Record results</p>				
How should I teach this?	<p>Harvest and explore vegetables</p> <p>Explore roots and leaves.</p> <p>Explore trees and leaves.</p> <p>Visit local park/allotment</p> <p>Explore/try a range of fruits and vegetables textures, colours, size etc.</p> <p>Use an increasing number of raw ingredients and resources to create healthy snacks.</p> <p>Record likes/dislikes in relation to responses to food textures, smells and tastes.</p> <p>Look at the link between healthy foods and how they contribute to our health.</p> <p>Visit the local park to explore leaves and seeds.</p> <p>Use an increasing number of raw ingredients and resources to create food.</p> <p>Explore/try a range of foods.</p> <p>Use an increasing number of raw ingredients.</p> <p>Look at healthy / unhealthy foods. Which ones do we like and why.</p> <p>Create groups of healthy and unhealthy foods.</p>				