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# Skills progression







Colour coding: The crops have been colour coded to suggest most suitable year groups. This information is based on an assessment of the skills required to plant, manage and harvest the crop. **Foundation stage**, **Y1/2**, **Y3/4**, **Y5/6**





Royal Horticultural Society



growit

# Skills progression

- Unit 1 - Tool and Equipment Use**
- Unit 2 - Watering**
- Unit 3 - Preparing Soil for Sowing**
- Unit 4 - Seed Sowing** (Sowing indoors in containers)
- Unit 5 - Outdoor Seed Sowing/Planting**
- Unit 6 - Planting Out** (Plants grown in pots or bare root plants as opposed to seeds.)
- Unit 7 - Caring for a Planted Area**
- Unit 8 - Harvesting**
- Unit 9 - Composting**



Learning Objectives (Programme of Study)	Skills children will use to demonstrate their knowledge	Guidance Notes	Subject based skills
Ask questions about why things happen and how things work.	I can use simple tools safely. I know what a spacing stick is. I can clean simple tools.	Tools: trowels, hand forks, dibbers, bulb planters, hand brushes, spacing sticks, small watering cans	Use appropriate sized hand tools to dig soil and incorporate compost. Recognise a spacing stick. Clean a tool with guidance. Handle watering cans with help.
Sc3. 1d. Find out about the uses of a variety of materials and how these are chosen for specific uses on the basis of their simple properties.	I can name and use a range of garden tools. I know which equipment to use when cleaning tools. I know how to use a range of tools safely. I know how to clean tools safely. I can use a spacing stick to help aid planting. I know how to use a watering can.	Tools: hand tools, hoes, rakes, spades, hand brushes, spacing sticks, small watering cans,	Use appropriate sized tools to weed, dig, add compost and make planting holes. Begin to use simple equipment to clean tools. Know how to carry and pass tools. Know how to place tools when not in use. Use a spacing stick with guidance. Handle simple watering equipment.
Sc3. 1a. To compare everyday materials and objects on the basis of their material properties, including hardness, strength, flexibility etc and to relate these properties to everyday uses of the materials.	I can name and use a wide range of tools. I know how to use garden tools safely. I know which equipment to use when cleaning tools. I can give reasons for maintaining equipment. I can select appropriate rose heads for watering plants. I can use a spacing stick to ensure effective planting. I can use alternative equipment when necessary. I can use appropriate ties and knots to support plants.	Tools: hand tools, hoes, rakes, spades, forks, hand brushes, spacing sticks, watering cans, hoses, plant ties	Use appropriate sized tools for a variety of tasks e.g. preparing own drills and planting holes. Know which equipment is suitable for cleaning tools.  Know how to handle tools when they are being cleaned.  Understand and explain why tools should be maintained. Use a spacing stick to aid planting at equal distances and to ensure straight lines. Use watering cans and fit appropriate sized roses. Select and use hoses when appropriate. Tie plants to support where necessary using the appropriate ties and knots.



Learning Objectives (Programme of Study)	Skills children will use to demonstrate their knowledge	Guidance Notes	Subject based skills
Find out about, and identify, some living things, objects and events they observe.	I can help water seeds and plants.	Watering of established plants.	To assist an adult in watering an area. To talk about the equipment being used. To discuss whether the plants needs are met.
Sc2. 2b. That humans, animals and plants need food and water to stay alive. Sc2. 5c. To know how to care for the environment.	I can talk about the importance of water. I can select and fill a watering. I know to check the water supply has been turned off. I can give reasons for regular watering of plants.	Use watering can to water established plants. Use a fine rose to water seedlings.	Talk about the importance of water. Select the appropriate equipment to water an area under guidance. To ensure the water supply is turned off. <i>Leave the watering equipment clean and tidy.</i>
Sc2. 3a. The effect of light, air, water and temperature on plant growth. Sc2. 5c. To know how to care for the environment.	I can select and fill a watering can. I can select the appropriate watering equipment for the plants/area in question. I can water plants and recognise when their needs are met. I can give reasons for regular watering of plants. I can describe the effects of under or over watering. I know to check that the water supply has been turned off.	Children to water plants and judge when plants needs have been met. Ensure that children know how to prioritise plants if time is short. Leave children to water plants independently.	Identify the need for watering. Select the appropriate equipment. To fit a rose for delicate plants or seedlings. Avoid wetting leaves in bright sunlight and know why. Water plants to sufficiency. Ensure the water supply is turned off. <i>Leave the watering equipment clean and tidy.</i>



Learning Objectives (Programme of Study)	Skills children will use to demonstrate their knowledge	Guidance Notes	Subject based skills
Investigate objects and materials by using their senses as appropriate.	<p>I can talk about soil.</p> <p>I can use a hand tool to help remove weeds and stones from the soil.</p> <p>I can help to loosen the soil surface.</p>	<p>Weed an area.</p> <p>Begin to create suitable, level tilth by using hand tools to loosen the soil surface.</p>	<p>Talk about what they can see and feel in different soils.</p> <p>Remove weeds with help.</p> <p>Assist an adult in preparing soil surface using hand tools.</p> <p>Learn about the importance of washing hands.</p>
<p>Sc3.</p> <p>1a. To use their senses to explore and recognise the similarities and difference between materials.</p>	<p>I can describe the differences I see/feel in soil.</p> <p>I can remove weeds and other debris from soil by using tools.</p> <p>I can loosen the soil surface and leave it level.</p>	<p>Weed an area.</p> <p>Create suitable, level tilth by using tools to loosen the soil surface.</p>	<p>Talk about the differences they find in soil.</p> <p>Remove unwanted weed growth and old crops as directed, using given tools.</p> <p>Assist an adult in preparing soil surface using tools (some or all of: hand tools, forks and rakes).</p> <p>Leave soil surface as directed.</p> <p><i>Dispose of any waste and leave site tidy.</i></p>
<p>Sc2.</p> <p>5a. To know about the ways in which living things and the environment need protection.</p> <p>Sc3.</p> <p>1d. Describe and group soils on the basis of their characteristics including appearance, texture and permeability.</p> <p>2a. Describe the changes that occur when materials are mixed.</p> <p>3a. How to separate solid particles of different sizes by sieving.</p>	<p>I can identify some weeds and old crops.</p> <p>I can remove debris using the appropriate tools.</p> <p>I can create a fine and level tilth ready for seed sowing.</p> <p>I can conduct hand texturing soil tests.</p> <p>I can determine some soil types.</p> <p>I can determine soil types and determine pH of soil types.</p>	<p>Weed area.</p> <p>Decide if cultivation is necessary.</p> <p>Create suitable, level tilth by using appropriate tools to loosen the soil surface.</p> <p>Conduct soil tests.</p>	<p>Identify weeds and old crops.</p> <p>Remove unwanted weed growth and old crops.</p> <p>Discuss the soil surface and decide if preparation is necessary.</p> <p>Select appropriate equipment.</p> <p>Prepare soil surface if required to create tilth appropriate to the seeds that will be sown.</p> <p>Conduct a simple hand texturing test on soil samples.</p> <p>Determine soil type and follow instructions to establish pH of soil sample using equipment.</p> <p><i>Dispose of any waste and leave site tidy.</i></p>



Learning Objectives (Programme of Study)	Skills children will use to demonstrate their knowledge	Guidance Notes	Subject based skills
Find out about, and identify, some features of living things, objects and events they observe.	<p>I can help fill a container with compost.</p> <p>I can handle seeds carefully.</p> <p>I can place a seed into the soil.</p> <p>I can cover a container with assistance.</p> <p>I can help to find a place to keep the planted seeds.</p>	<p>Refer to Kitchen Garden Planner for specific crops.</p> <p>Ideally sow crops direct (outside). If weather conditions are not favourable sow into containers and place in a cold frame or similar.</p>	<p>Fill a container as instructed.</p> <p>Sow medium to large seed as instructed.</p> <p>To be able to cover container with assistance.</p> <p>Begin to learn that plants need certain conditions to germinate.</p> <p><i>To help leave area tidy.</i></p> <p><i>To help clean equipment.</i></p>
<p>Sc2.</p> <p>3a. Recognise that seeds need light and water to grow.</p> <p>3b. Recognise and name the leaf, flower, stem and root of flowering plants.</p> <p>3c. That seeds grow into flowering plants.</p>	<p>I can follow instructions to fill a container.</p> <p>I know how to handle seeds carefully.</p> <p>I know how to plant a medium to large seed.</p> <p>I can cover the seeds.</p> <p>I can suggest some conditions that plants need to germinate.</p>		<p>Fill a container with compost.</p> <p>Prepare the container for planting as instructed.</p> <p>Sow seeds with guidance.</p> <p>Cover seeds with guidance.</p> <p>Appreciate some conditions for germination.</p> <p><i>Leave equipment and area clean and tidy.</i></p>
<p>Sc 2</p> <p>3a. The effect of light, air, water and temperature on plant growth.</p> <p>3b. The role of the leaf in producing new material for growth.</p> <p>3c. That the root anchors the plant, and that water and minerals are taken in through the root and transported through the stem to other parts of the plant.</p> <p>3d. Know the parts of the flower, their role in the life cycle of flowering plants, including pollination, seed formation, seed dispersal and germination.</p>	<p>I can fill a container to the correct depth.</p> <p>I can prepare a container for planting.</p> <p>I can sow seeds of varying sizes to the appropriate density.</p> <p>I can suggest ways for covering seeds.</p> <p>I know how to water seeds.</p> <p>I can suggest the amount of water needed for seeds.</p> <p>I know that different plants require different conditions to germinate.</p>	<p>With help, design and make a form of protection for plants e.g. tunnel, fleece covering</p> <p>Sow Alpine strawberries (very fine seed) as an extension to crops in planner.</p> <p>Grow in cold frame until Spring.</p>	<p>Fill a container with the appropriate compost.</p> <p>Prepare the container for planting.</p> <p>Sow seeds at correct depth.</p> <p>Suggest method for covering seeds.</p> <p>Select method of watering.</p> <p>Select appropriate area that will provide the required temperature, light and humidity for germination to take place.</p> <p><i>Leave equipment and area clean and tidy.</i></p>



Learning Objectives (Programme of Study)	Skills children will use to demonstrate their knowledge	Guidance Notes	Subject based skills
Find out about, and identify, some features of living things, objects and events they observe.	<p>I can plant seeds.</p> <p>I can help make holes for planting.</p> <p>I can help to water the drill/hole before sowing/ planting.</p>	Refer to Kitchen Garden Planner for specific crops.	<p>Make holes using bulb planters, trowels and dibbers.</p> <p>Assist adult in pre-watering hole.</p> <p>Plant seeds into prepared ground.</p>
<p>Sc2.</p> <p>3a. Recognise that plants need light and water to grow.</p> <p>4b. Group things according to observable similarities and differences.</p>	<p>I can plant seeds by using tools.</p> <p>I can plant seeds at even spacing.</p> <p>I can use pre-made drills.</p> <p>I can help to water the drill/hole before sowing/planting and understand why.</p> <p>I can label what I have planted.</p>		<p>To make own holes in prepared ground.</p> <p>Assist adult in pre-watering holes/drills.</p> <p>Plant a range of medium and large sized seeds into prepared soil.</p> <p>Begin to appreciate the need for correct spacing.</p> <p>Begin to recognise and use drills with guidance.</p> <p>Recognise the importance of labelling.</p>
<p>Sc2.</p> <p>3a. The effect of light, air, water and temperature on plant growth.</p> <p>3b. The role of the leaf in producing new material for growth.</p> <p>3c. That the root anchors the plant, and that water and minerals are taken in through the root and transported through the stem to other parts of the plant.</p> <p>3d. About the part of a flower and their role in the life cycle of flowering plants, including pollination, seed formation, seed dispersal and germination.</p>	<p>I can make straight drills, of consistent depth, with a trowel or hoe.</p> <p>I can sufficiently water drills or holes before sowing/planting.</p> <p>I can plant a range of seeds at appropriate spacing.</p> <p>I can label what I have planted.</p>	Refer to Kitchen Garden Planner for specific crops.	<p>Decide whether individual planting holes or drills are most appropriate.</p> <p>Make necessary planting holes if required using appropriate tools.</p> <p>Make necessary drills, if required, with trowel or hoe.</p> <p>Pre-water drills/holes and allow to drain before sowing.</p> <p>Plant a range of seeds at appropriate spacing.</p>



Learning Objectives (Programme of Study)	Skills children will use to demonstrate their knowledge	Guidance Notes	Subject based skills
Observe, find out about and identify features in the place they live and the natural world.	I can dig a hole. I can help remove a plant from a container.	Refer to Kitchen Garden Planner.	Dig a hole with assistance. Remove a plant from a container with assistance. Plant with assistance.
Sc2. 3a. Recognise that plants need light and water to grow. 3b. Recognise and name the leaf, flower, stem and root of flowering plants. 5b. Identify similarities and differences which affect plants. 5c. To care for the environment.	I can dig a hole using the correct tools. I know how to treat a plant carefully when it is being removed from a container. I can use the word 'moisture' in relation to the soil. I can use a spacing stick. I can place the plant in the hole and back fill the hole. I can explain how I would care for the plant.		Make planting hole to receive a plant using given tools. With assistance, remove plant from a container. Begin to understand the meaning of the word moisture. Place plant in position indicated by the spacing stick. Back fill the hole and firm plant in. Label plant with assistance. Discuss the aftercare of the plant. Provide aftercare e.g. support, watering, mulching. Leave site in a suitable condition.
Sc2. 3a. The effect of light, air, water and temperature on plant growth. 3b. The role of the leaf in producing new material for growth. 3c. That the root anchors the plant, and that water and minerals are taken in through the root and transported through the stem to other parts of the plant. 3d. About the part of a flower and their role in the life cycle of flowering plants, including pollination, seed formation, seed dispersal and germination. 5a. Know about ways in which living things and the environment need protection. 4c. That the variety of plants makes it important to identify them and assign them to groups.	I can use a mark for a planting hole. I can decide how big the planting hole should be. I can assess moisture levels and water if necessary. I can remove a plant from a container. I can place a plant in a planting hole, back fill and firm in. I can label the plant. I can discuss the aftercare required. I can describe bare root plants. I can describe how bare root plants should be cared for.	Refer to Kitchen Garden Planner.  Heeling in – bare root plants should be grouped and planted together until ground is ready.  Bare root plants should only be planted between November and March.	Check container for moisture and water if required. Select appropriate tools and make a planting hole of appropriate size. Remove plant from container and loosen roots if necessary. Plant and back fill hole, firm plant in, water and label. Discuss and prioritise the aftercare required. Provide aftercare as required e.g. support, mulching. To know that plants can be supplied as bare root plants and that these need to be treated differently from pot plants. Know that these plants need to be handled quickly on delivery. Know that the roots should not be exposed to the air. Know that bare root plants need to soak in water before they are planted. Know about 'heeling in' . (Delaying planting until ground is ready.)



Learning Objectives (Programme of Study)	Skills children will use to demonstrate their knowledge	Guidance Notes	Subject based skills
Ask questions about why things happen and how things work.	I can use tools to remove weeds. I know where to put unwanted weeds. I can apply mulch.	Begin to differentiate between weeds and crops.  After removing weeds, apply mulch if required.	Identify weeds with guidance.  Use hand tools as instructed to aid the removal of weeds.  <i>To know how to dispose of waste to designated area.</i>
Sc2. 4b To group living things according to observable similarities and differences. 5c.To know how to care for the environment.	I can use tools to remove weeds. I know where to put unwanted weeds. I can discuss the surface area. I can talk about the work that might need to be carried out. I can carry out the work to improve the surface area. I can use mulch to improve soil. I can name several reasons for using mulch.	Recognise difference between weeds and crops.  Recognize difference between annual and perennial weeds.  Apply mulch, if required, and understand reason for applying mulch.	Remove any indicated weeds, leaves and other debris as instructed using given tools.  Discuss the surface and carry out any required surface cultivation to the area.  Leave the surface in an appropriate condition as instructed.  <i>Dispose of waste/debris to designated area.</i>  <i>Leave the site and equipment clean and tidy.</i>
Sc2. 2b. To know that the life processes common to plants include growth, nutrition and reproduction. 3d. To know about the parts of the flower and their role in the life cycle of flowering plants, including pollination, seed formation, seed dispersal and germination.  Sc3. 3a. To know how to separate solid particles of different sizes by sieving.	I can select appropriate equipment for a given task. I can remove weeds and other debris. I can suggest how to improve the appearance of the soil. I can work the soil to help maintain it. I can leave the surface in an appropriate condition. I can select the required amount of mulch to be used to improve soil conditions. I understand the reasons for applying mulch. I can name several different kinds of mulch. I can recommend future work needed within a given timescale.	Identify weeds by using identification guides.  Apply mulch, if required, and understand reason for applying mulch  Make a weed herbarium (a collection of pressed plants, showing all parts).	Select equipment for task. Remove weeds and other debris. Discuss surface cultivation and make suggestions for maintaining acceptable visual appeal. Carry out any required surface cultivation to the area to maintain acceptable visual appearance. Apply mulch to established plants to reduce water loss from soil and to prevent weed growth. Leave the soil surface in an appropriate condition. <i>Dispose of waste/debris to designated area.</i>  <i>Leave site and equipment clean and tidy.</i>



Learning Objectives (Programme of Study)	Skills children will use to demonstrate their knowledge	Guidance Notes	Subject based skills
Investigate objects and materials by using all of their senses as appropriate.	<p>I can identify some fruit and vegetables.</p> <p>I can handle fruit and vegetables.</p> <p>I can talk about how we use fruit and vegetables when they are harvested.</p>	Refer to Kitchen Garden Planner for guidance.	<p>Gather fruit and vegetables as directed.</p> <p>Learn to care for harvested food.</p> <p>Begin to understand how the crops can be used.</p>
<p>Sc2.</p> <p>4b. To group living things according to observable similarities and differences.</p> <p>2g. To know that the senses enable humans to be aware of the world around them.</p>	<p>I can, with help, compare the different stages of fruit and vegetables.</p> <p>I can make judgments about which fruit and vegetables are ready to be used.</p> <p>I can talk about how the fruit and vegetables can be used in different ways.</p>		<p>To compare like for like.</p> <p>Select fruit and vegetables to be harvested with guidance.</p> <p>To give suggestions how fruit and vegetables can be used.</p>
<p>Sc2.</p> <p>4b. To know that locally occurring plants can be identified and assigned to groups.</p> <p>5a. To know about ways in which living things and the environment need protection.</p>	<p>I can compare the different stages of fruit and vegetables.</p> <p>I can determine when fruit and vegetables are ready for harvesting.</p> <p>I can harvest fruit and vegetables without damaging the crop or plant.</p> <p>I can suggest methods for persevering crops for future use.</p>		<p>Recognise when fruit and vegetables are at their best and ready for harvesting. (Trial and error)</p> <p>Harvest fruit and vegetables without damaging the crop or the plant it came from.</p> <p>Consider methods of storage for harvested crops.</p>



Learning Objectives (Programme of Study)	Skills children will use to demonstrate their knowledge	Guidance Notes	Subject based skills
Investigate objects and materials by using all of their senses as appropriate.	<p>I can talk about garden waste.</p> <p>I can separate some waste materials.</p> <p>I can put waste in the compost bin.</p>	<p>Keep leaves in a separate bin.</p> <p>Good quality compost needs a balance of carbon rich (dry) and nitrogen rich (wet) soils.</p>	<p>To begin to understand there are different types of waste.</p> <p>Separate autumn leaves from other waste products.</p> <p>Dispose of garden waste to the designated areas with help.</p>
<p>Sc2.</p> <p>5c.</p> <p>To know how to care for the environment.</p> <p>Sc3.</p> <p>1b. To sort objects into groups on the basis of simple material properties.</p> <p>1c. To recognise and name common types of materials and recognise that some of them are found naturally.</p> <p>1d. To find out about the uses of a variety of materials and how they are used.</p>	<p>I can name types of garden waste.</p> <p>I can separate the different types of garden waste into the appropriate bin.</p> <p>I can make compost.</p>	<p>Carbon rich: straw, brown stems, newspaper.</p> <p>Nitrogen rich: grass cuttings, peelings, weeds.</p> <p>Create thin layers of each type.</p>	<p>Know what waste is and how to dispose of waste to lessen the impact on the environment.</p> <p>Separate different types of garden waste with assistance.</p> <p>Dispose of garden waste appropriately.</p> <p>Make compost with assistance.</p>
<p>Sc2.</p> <p>5f. To know that micro – organisms are living organisms that are often too small to be seen, and that they may be beneficial ( for example , in the breakdown of waste) or harmful ( for example, in causing food to go mouldy).</p>	<p>I can talk about the different types of waste materials.</p> <p>I can make compost from waste materials.</p> <p>I know how to store compost.</p> <p>I recognise when compost is ready for use.</p> <p>I can suggest different uses for compost.</p>		<p>Know the importance of separating leaves from garden waste.</p> <p>Discuss the importance of separating annual and perennial weeds.</p> <p>Understand why diseased plants need to be kept out of the compost.</p> <p>Know how to make compost and store it appropriately.</p> <p>Know how to mix the right ingredients to make good quality compost.</p> <p>Know the importance of compost in the garden.</p>





Unit 10 - Planning a New Garden  
Unit 11 - Planning for Planting  
Unit 12 - Cultivate Land By Single Digging  
Unit 13 - Seed Collecting





Learning Objectives (Programme of Study)	Skills children will use to demonstrate their knowledge	Guidance Notes	Subject based skills
Investigate objects and materials by using their senses as appropriate.	I can name some fruit and vegetables that I like and dislike.  I can name some of the things you might find in a garden.	Explore a box of fruit and vegetables. Ask the children to feel, smell and taste produce.	Identify fruit and vegetables.  Express likes and dislikes about fruit and vegetables.  Use the term garden and refer to features in a garden.
Sc.2. 5b. Identify similarities and differences between local environments and ways in which these affect animals and plants that are found there. 5c. To care for the environment.	I know that a garden can be used for different things. I can identify an area for a garden and give reasons for my ideas. I can plan a garden. I can describe my ideas for planting.	Visit gardens and discuss the differences they observe and the features and designs they like.	Understand the different functions of gardens (pleasure, wildlife, food growth, ornamental value).  Identify sites for a garden.  Give reasons for suitability of site with help.  Plan a garden with some knowledge of plants.
Sc2. 5b. To know that different plants are found and are suited to different areas. 5a. To know that living things and the environment need protection. 1b. To know that the life processes common to plants include growth, nutrition and reproduction.	I can describe why gardens are used in particular ways. I can give reasons why some areas are more suitable than others for developing a garden. I can design a garden which meets the needs of the users. I can create a design for a garden which includes some specific plant knowledge. I can create a planting plan with some knowledge of plant growth and the fruit and vegetables that will be produced I can create a design to scale and give mapping details.	Draw plans for a garden with some features marked. Talk about materials. Express preferences for some plants over others.  Draw scaled plan of garden.  Mark features. Investigate conditions certain plants need and plan their location.	Discuss how and why gardens are used in particular ways.  Identify a suitable site for a garden and present reasons for choice.  Design a garden with knowledge of use requirements. Demonstrate knowledge of particular food plants that require certain conditions in order to produce fruit and vegetables.  Appreciate the need for accurate mapping and scaling.



Learning Objectives (Programme of Study)	Skills children will use to demonstrate their knowledge	Guidance Notes	Subject based skills
Investigate objects and materials by using their senses as appropriate.	<p>I can name some fruit and vegetables that I like and dislike.</p> <p>I can name some of the things you might find in a garden.</p> <p>I can name some fruit and vegetables we could grow to eat.</p>	<p>Explore food plants in containers.</p> <p>Look at food plants growing in the garden. Name the parts of the plant.</p> <p>Encourage the children to give reason for their preferences.</p>	<p>Identify fruit and vegetables.</p> <p>Express like and dislikes for fruit and vegetables.</p> <p>Begin to use the term garden and refer to features in a garden.</p> <p>Begin to understand what happens to the food when it is produced.</p>
<p>Sc.2</p> <p>3a. To recognise that plants need light and water to grow.</p> <p>3b. To recognise and name the lead, flower, stem and root of flowering plants.</p> <p>3c. To know that seeds grow into flowering plants.</p> <p>4b To group living things according to observable similarities and differences.</p>	<p>I can plan a garden.</p> <p>I can group plants together.</p> <p>I can talk about a planting plan.</p> <p>I can create a planting plan.</p>	<p>Grouping activities.</p> <p>Group plants according to colour, shape, leaf pattern, parts of the plant you eat and vegetable families.</p> <p>Share information found on seed packets.</p>	<p>With help plan a garden with knowledge of plants.</p> <p>With help suggest ways of grouping plant families.</p> <p>With help produce a sowing plan for the year.</p>
<p>Sc2.</p> <p>5a. To know about the ways in which living things and the environment need protection.</p> <p>5b. To know that different plants are suited to different areas.</p> <p>1b. To know that the life processes common to plants include growth, nutrition and reproduction.</p> <p>Sc2.</p> <p>4a. To make and use keys.</p> <p>4b. To know how locally occurring plants can be identified and assigned to groups.</p> <p>4c. To know that the variety of plants makes it important to identify them and assign them to groups.</p>	<p>I can design a garden.</p> <p>I can suggest suitable plants for the garden.</p> <p>I can give reasons why some areas are more suitable for plants than others.</p> <p>I can create a sowing plan with knowledge of quantities of fruit and vegetables likely to be produced.</p> <p>I can give reasons why we need to change the planting plan.</p> <p>I can refer to plans and records to inform planning for future produce growing.</p>	<p>Reading seed packets.</p> <p>Researching garden books.</p> <p>Websites. RHS</p> <p>Begin to plan with key focus on:</p> <p>1).When seeds need to be sown</p> <p>2). When produce will be ready</p> <p>Create a sowing plan with consideration for quantities needed.</p> <p>Use previous plans to rotate plant families.</p> <p>Record this years planting.</p>	<p>Design a garden with knowledge of some plants.</p> <p>To have knowledge of particular food plants.</p> <p>Name the conditions needed for the plants to produce fruit and vegetables.</p> <p>Create a sowing plan with an understanding of the quantities required at any particular time.</p> <p>Understand who can use the produce and say how it might be used.</p> <p>To begin to understand crop rotation.</p> <p>To refer to plans and records to inform future sowing plans.</p>



Learning Objectives (Programme of Study)	Skills children will use to demonstrate their knowledge	Guidance Notes	Subject based skills
Investigate objects and materials by using their senses as appropriate.	I can remove weeds and stones with help. I can add compost to soil.	Weed area. Add organic matter. Mix organic matter into soil.	Remove weeds and stones with help. Add buckets of compost to soil and mix. Dispose of weeds and stones. <i>Leave equipment clean and tidy.</i>
Sc3. 1a. To use their sense to explore and recognise the similarities and difference between materials. 1d. To know about the uses of materials and how these are chosen for specific uses.	I can remove weeds and unwanted debris. I can add organic matter to soil. I can use the term 'single digging'.	Add organic matter to trenches dug by adult. Understand reasons for adding organic matter.	Remove unwanted debris and large stones. Add organic matter to soil as instructed by adult. To begin to understand and use the term, 'single digging'. Dispose of any waste. <i>Leave site clean and tidy.</i>
Sc3. 1a. To use their senses to explore and recognise the similarities and differences between materials. 1d. Describe and group soils on the basis of their characteristics including appearance, texture and permeability. 2a. Describe the changes that occur when materials are mixed. 3a. How to separate solid particles of different sizes by sieving.	I can single dig an area. I can fork an area to the required depth. I can use the correct terminology. I can add the required amount of organic matter. I can remove unwanted debris. I can leave the surface with a coarse crumb structure.	Dig trench. Add organic matter. Turn next trench on top. Repeat until finished. Leave even and coarse.	Assess soil type and decide if single digging is required. Single dig and fork as appropriate to one spit deep. Understand why the top soil is turned. Turn top soil and ensure the burial of surface growth. Incorporate appropriate quantity of organic material into soil. Remove unwanted debris and large stones. Leave area with coarse crumb structure for weathering. Leave finished surface even. <i>Dispose of waste, leave site and equipment clean and tidy.</i>

**Note** - Single digging is not always necessary, especially where crops are grown in permanent beds. Depending on soil type and condition, mulching with organic matter for the winter and lightly forking in the spring may be a suitable alternative.



Learning Objectives (Programme of Study)	Skills children will use to demonstrate their knowledge	Guidance Notes	Subject based skills
Observe, find out about and identify features in the place they live and the natural world.	I can talk about seeds and seed pods.	Seeds: Beans, peas, wheat.	Identify a dry pod with support.
Sc3. Use their senses to explore and recognise the similarities and differences between materials. Sc2. 4b. Group things according to observable similarities and differences.	I can identify dry pods. I can collect dry pods and seeds. I can label the seeds collected. I know that some seeds can be eaten.	Seeds: Beans, peas , wheat sunflowers	Identify dry pods and collect seeds . Label seed collection.
Sc2. 3d. Learn about the parts of a flower and their role in the life cycle of flowering plants, including pollination, seed formation, seed dispersal and germination. 4b. How locally occurring plants can be identified and assigned to groups. 4c. That the variety of plants makes it important to identify them and to assign them to groups. 5a. About the ways in which living things and the environment need protection.	I can identify a range of dry pods and ripe seeds. I know that some seeds require further treatment. I can suggest ways of storing seeds for future use. I can label the collection of seeds. I can talk about the different methods of seed dispersal.	Seeds: Pumpkin seeds Seeds: Tomatoes and radishes Tomato seeds, from fruit that is just past the eating stage, should be fermented in a jar for 3 days, then washed and rubbed clean in a sieve to remove the sticky gel that surrounds the seed. They can then be dried on a windowsill before being separated and stored. Seeds should be dried sufficiently before being stored in an airtight container (screw top lids and film canisters are good). Ideal storage conditions are cool (5 degrees C or less) and dark.	Identify dry pods and other ripe seeds. Discuss ways of drying and storing seeds. Label seed collection. Identify methods of seed dispersal. Know that some seeds, such as tomatoes, require further treatment.





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# Seasonal Skills Spring

**Unit 14 - Winter Pruning in the Spring Term**

**Unit 15 - Crop Protection**



**Skills progression**



Learning Objectives (Programme of Study)	Skills children will use to demonstrate their knowledge	Guidance Notes	Subject based skills
<p>Sc 2.</p> <p>3a. To know about the effect of light, air, water and temperature on growth.</p> <p>3b. The role of the leaf in producing new growth.</p>	<p>I can safely handle secateurs.</p> <p>I know how to use secateurs.</p> <p>I can identify parts of plants that need pruning with some assistance.</p> <p>I can prune plants with some guidance.</p> <p>I can identify branches for pruning.</p> <p>I can prune branches independently.</p>	<p>Pruning should take place before leaves appear.</p> <p>Adult support is required for this activity.</p> <p>Refer to <i>Open Futures Manual: Pruning instructions</i></p> <p>Winter pruning is necessary for:</p> <p>Autumn raspberries.</p> <p>Blackberries.</p> <p>Blueberries.</p> <p>Apple and pear trees if grown in school orchard.</p> <p>Restricted form of apples and pear trees are pruned in the summer.</p>	<p>To name suitable equipment for pruning.</p> <p>To be able to give reasons why pruning is necessary.</p> <p>To be able to identify which branches need pruning.</p> <p>To know how to prune each branch.</p> <p>To know how to dispose of pruning debris.</p> <p><i>Leave area clear and tidy.</i></p>



Learning Objectives (Programme of Study)	Skills children will use to demonstrate their knowledge	Guidance Notes	Subject based skills
Investigate objects and materials by using all of their senses as appropriate.	I can talk about covering crops. I can help cover crops.	Cover early growth of potatoes with soil if frost threatens.  Spring grown Broad Beans shouldn't need protection.	Talk about why we cover crops. Investigate ways to cover crops. Help cover crops.
Sc2. 3a. To know that plants need light and water to grow. 4b. To be able to group living things according to similarities and differences.	I can give reasons why crops are covered. I can name the different ways to cover crops. I can cover crops.	Spinach: protection shouldn't be required.  Peas may need protection from birds. (Pea sticks)  Wheat may need protection from birds.	Discuss reasons why crops need covering. Discuss different methods of covering crops. Apply protective materials to crops as directed.
Sc2. 3a. To know about the effect of light, air, water and temperature on plant growth. 4c. To know that the variety of plants makes it important to identify them and assign them to groups.	I can identify some crops which need protection and give reasons why. I can cover crops independently. I know how to use the different crop protection methods. I can apply and secure crop protection materials efficiently.	Radish and lettuce – early sowings benefit from fleece tunnels/cloche.  Spring onions and leeks: protection shouldn't be required.  Carrots – loose fitting fleece that will allow carrots to grow under will avoid carrot fly attack.  Consideration should be given to the local Climate. All young crops will benefit from frost protection.	Know why crops are protected. Name the different methods of crop protection. Know which crops need protection. Use appropriate securing methods for various forms of protection. Select the appropriate method of protection. Secure protective materials appropriately. To know how long crops need protection for. Appreciate the need to remove covers to allow pollination where required (e.g. beans and peas)





**Unit 16 - Seed Sowing** (To crop in Summer Term.)  
**Unit 17 - Seed Sowing and Planting** (To crop in the Autumn Term.)  
**Unit 18 - Pests**





Learning Objectives (Programme of Study)	Skills children will use to demonstrate their knowledge	Guidance Notes	Subject based skills
Find out about, and identify, some features of living things, objects and events they observe.	<p>I can help fill a container.</p> <p>I can handle seeds carefully.</p> <p>I can cover a container with assistance.</p> <p>I can place a seed into the soil.</p>	Herbs: Basil, Parsley, Coriander and Chives. Basil best grown on a windowsill.	<p>Sow seeds as instructed.</p> <p>Cover container with assistance.</p> <p>To help clean equipment and leave area tidy.</p>
<p>Sc2.</p> <p>3a.To recognise seeds need light and water to grow.</p> <p>3b.To recognise and name the leaf, flower, stem and root of flowering plants.</p> <p>3c. To know that seeds grow into flowering plants.</p>	<p>I can follow instructions to fill a container.</p> <p>I know how to handle seeds carefully.</p> <p>I know how to plant a medium to large seed.</p> <p>I can cover the seeds appropriately.</p> <p>I can make a drill with some guidance.</p> <p>I can use a measuring stick with some guidance.</p> <p>I can cover the seeds appropriately.</p> <p>I can remember to write a label.</p> <p>I can water to sufficiency with guidance.</p>	<p>1. French Beans need to be started in pots.</p> <p>2. Peas and Spinach can be sown direct into the ground.</p> <p>To crop in summer term French Beans and Peas must be sown in early April.</p>	<p>1. Fill a container to a given depth.</p> <p>Prepare the container for planting as instructed.</p> <p>Sow seeds with guidance.</p> <p>Cover seeds with guidance.</p> <p>Water to sufficiency by either using a fine rose or by standing in water.</p> <p>2. Make a drill of specified depth.</p> <p>Plant seeds with given spacing using measuring stick.</p> <p>Cover seeds with guidance and label drill.</p> <p>Water to sufficiency by using a fine rose.</p> <p><i>Leave area and equipment clean and tidy.</i></p>
<p>Sc2.</p> <p>3a To know the effect of light, air, water and temperature on plant growth.</p> <p>3b. To know the role of the leaf in producing new material for growth.</p> <p>3c. To know the root anchors the plant, water and minerals are taken in through the root and transported through the stem to parts of the plant.</p> <p>3d. To recall parts of the flower and their role in the life cycle of flowering plants.</p> <p>4c. To know the importance of assigning plants to groups.</p>	<p>I can create a drill to the required depth and length.</p> <p>I can create a drill knowing the distance required between rows.</p> <p>I can plant seeds the right distance apart.</p> <p>I can sow seeds of varying sizes to the appropriate density.</p> <p>I can cover the seeds.</p> <p>I can water to sufficiency.</p> <p>I can label the drill.</p> <p>I can thin out carrot seedlings.</p>	<p>Lettuce</p> <p>Radish.</p> <p>Spring onions</p> <p>Carrots: early sown carrot seeds should provide a crop in summer term. Varieties to use: Round, Amsterdam and Nantes.</p> <p>Refer to <i>Teachers Manual</i> for guidance on thinning out of carrots.</p>	<p>Make a drill to the required depth using the appropriate tool.</p> <p>Know the distance required between rows and between crops within the row.</p> <p>Cover the seeds in the appropriate manner.</p> <p>Water to sufficiency.</p> <p><i>Leave area and equipment clean and tidy.</i></p> <p>Thin out seedlings.</p>



Learning Objectives (Programme of Study)	Skills children will use to demonstrate their knowledge	Guidance Notes	Subject based skills
Find out about, and identify, some features of living things, objects and events they observe.	<p>I can create holes for planting.</p> <p>I can handle seed potatoes carefully.</p> <p>I can place seed potatoes in soil.</p> <p>I can cover seed potatoes with assistance.</p> <p>I can help water after planting.</p>	<p>Main crop potatoes: Use a bight resistant variety.</p> <p>When watering potatoes water the soil and not the leaves in order to reduce blight.</p>	<p>Talk about planting seed potatoes.</p> <p>Sow seed potatoes with guidance.</p> <p>Cover seed potatoes with guidance.</p> <p>Water the row(s).</p> <p><i>To help clean equipment and leave area tidy.</i></p>
<p>Sc2.</p> <p>3a. To recognise that seeds need light and water to grow.</p> <p>3b. To recognise and name the leaf, flower, stem and root of flowering plants.</p> <p>3c. To know that seeds grow into flowering plants.</p>	<p>I can make a drill, or planting hole, with some guidance.</p> <p>I can use a measuring stick with some guidance.</p> <p>I can cover the seeds appropriately.</p> <p>I can remember to write a label.</p> <p>I can water to sufficiency with some guidance.</p> <p>I can suggest several ways of protecting young plants and understand why.</p>	<p>Pumpkins: Plant seeds sideways on.</p> <p>Pumpkin seeds can be planted in pots in April and then planted out at the end of May.</p> <p>Alternatively, seeds can be planted direct in May.</p> <p>Plants may benefit from cloche protection for first few weeks.</p> <p>Pumpkins: water and mulch well before the summer holidays.</p>	<p>Make a drill or planting hole of specified depth.</p> <p>Plant seeds with given spacing using measuring stick.</p> <p>Cover seeds with guidance.</p> <p>Water to sufficiency by using a fine rose.</p> <p>Label the drill.</p> <p>Suggest ways of protecting the plants and reasons for doing so.</p> <p><i>Leave area and equipment clean and tidy.</i></p>
<p>Sc2.</p> <p>3a To know the effect of light, air, water and temperature on plant growth.</p> <p>3b. To know the role of the leaf in producing new material for growth.</p> <p>3c To know the root anchors the plant, that water and minerals are taken in through the root and transported through the stem to parts of the plant.</p> <p>3d. To recall the parts of the flower and their role in the life cycle of flowering plants.</p> <p>4c. To know the importance of assigning plants to groups.</p>	<p>I can make drills by using tools.</p> <p>I can sow seeds of varying sizes to the appropriate density.</p> <p>I can cover the seeds in the appropriate manner.</p> <p>I can water to sufficiency.</p> <p>I can identify a seed leaf from a true leaf.</p> <p>I can prick out seedlings.</p> <p>I can thin carrot seedlings.</p>	<p>Carrots:</p> <p>Protect with fleece to avoid carrot fly.</p> <p>Use Chantenay or Berlicum types.</p> <p>Tomatoes:</p> <p>Sow indoors in pots in April/May.</p> <p>Prick out when first true leaves appear.</p> <p>Grow on in a cold frame or window sill.</p> <p>Plant out from end of May.</p> <p>Refer to <i>Teachers Manual: Sowing Techniques</i> and <i>Crop Sheets</i> for information on pricking out.</p> <p>All crops will be more successful if a watering rota is established for the summer holidays.</p>	<p>Make a drill to the required depth by using appropriate tool.</p> <p>Know the distance required between rows.</p> <p>Plant and cover the seeds in the appropriate manner.</p> <p>Water to sufficiency.</p> <p>Know about the variety of tomato seeds planted.</p> <p>Know the difference between seed leaves and true leaves.</p> <p>Know how to remove seedlings without damaging the leaves, stem or roots.</p> <p>Know the depth required to plant tomato seedlings.</p> <p>Thin out carrot seedlings to correct spacing.</p> <p><i>Leave area and equipment clean and tidy.</i></p>



Learning Objectives (Programme of Study)	Skills children will use to demonstrate their knowledge	Subject based skills
Find out about, and identify, some features of living things, objects and events they observe.	I can identify some pests.	Talk about pests. Identify some pests in the school garden.
Sc2 5a.To find out about the different kinds of plants and animals in the local environment. 5b. To be able to identify similarities and differences between local environments and ways in which these affect animals and plants that are found there. 5c. To care for the environment.	I can name some common pests. I know how to look for damage caused by pests.	Name some common pests. Recognise some damage caused by pests.
Sc2 4b To know that locally occurring animals and plants can be assigned to groups. 5a. To know about ways in which living things and the environment need protection.. 5d. To use food chains to show feeding relationships in a habitat. 5e. To know how nearly all food chains start with a green plant.	I can name common garden pests. I can identify damage to crops caused by specific pests. I can name a range of methods we use at school to control pests. I can identify areas where pests are likely to occur.	Name common garden pests. Recognise forms of damage caused by specific pests. Suggest suitable methods to control pests. Use routine checks to identify potential pest infected areas.

Pest	Crop	Methods of Control
Aphids	Broad Beans	Attract predators to garden. Squash with fingers.
Birds	Strawberries, Wheat, Peas	Netting, Pea Sticks, Scarecrows
Carrot fly	Carrots, Parsnips	Fleece, Physical barrier
Caterpillars	Brassicas (e.g. cabbages)	Netting with fine mesh. Squash with fingers
Slugs and snails	Most crops at seedling stage	Attract predators, Nematodes, Traps