

**Pentecost 2**  
**Science Year 3: Plants (Biology)**

Scripture Link: *Genesis 1:29*

**National Curriculum Objective**

**Enquiry Question: How do plants keep growing?**

	Lesson 1	Lesson 2	Lesson 3
<b>Learning intention for each lesson</b>	To identify and describe the functions of different parts of a flowering plant.	To know what plants require for healthy growth	To know how water is transported in plants
<b>Recall and Retrieval</b>	Name the basis parts of a plant and describe their functions	know that flowering plants consist of: stigma, , style, ovary, ovule, stem, sepal, filaments, anther, petal and some information about them	That plants need air, light, warmth, water and nutrients to be healthy. That if these things are missing, then the plants growth may be affected or it may die. That the basic structure of a tree is: roots, trunk, leaves, branches, crown.
<b>Sequence of substantive knowledge throughout the lesson</b>	I know that flowering plants consist of: stigma, , style, ovary, ovule, stem, sepal, filaments, anther, petal I know that a stamen is the male reproductive organ of a flower and consists of an anther held up on a filament. . I know that the petal attracts pollinating insects and is often brightly coloured. That the stigma is the top of the female part of the flower which collects the pollen grains. That the ovary produces the ovules.	That plants need air, light, warmth, water and nutrients to be healthy.  That if these things are missing, then the plants growth may be affected or it may die.	That water is an important part of a plants life and growth.  Water is absorbed from the soil through the roots.  The water travels up the plant through the water transport system.  Plant stalks are made up of hollow tubes called xylem.  Xylem tubes move the water up the plants stem to the leaves, stem and flowers. This is called capillary action.
<b>Key Skills/disciplinary knowledge</b>	<ul style="list-style-type: none"> <li>• asking relevant questions and using different types of scientific enquiries to answer them;</li> <li>• making systematic and careful observations</li> <li>• gathering, recording, classifying and presenting data in a variety of ways to help in answering questions;</li> </ul>	<ul style="list-style-type: none"> <li>• asking relevant questions and using different types of scientific enquiries to answer them;</li> <li>• setting up simple practical enquiries, comparative and fair tests;</li> <li>• making systematic and careful observations</li> <li>• gathering, recording, classifying and presenting data in a variety of ways to help in answering questions;</li> </ul>	<ul style="list-style-type: none"> <li>• asking relevant questions and using different types of scientific enquiries to answer them;</li> <li>• setting up simple practical enquiries, comparative and fair tests;</li> <li>• making systematic and careful observations</li> <li>• gathering, recording, classifying and presenting data in a variety of ways to help in answering questions;</li> </ul>

	<ul style="list-style-type: none"> <li>reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions;</li> <li>using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions;</li> <li>identifying differences, similarities or changes related to simple scientific ideas and processes;</li> </ul>	<ul style="list-style-type: none"> <li>recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables;</li> <li>using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions;</li> <li>identifying differences, similarities or changes related to simple scientific ideas and processes;</li> </ul>	<ul style="list-style-type: none"> <li>recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables;</li> <li>using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions;</li> <li>identifying differences, similarities or changes related to simple scientific ideas and processes;</li> </ul>
<b>Key Vocabulary</b>	Photosynthesis, pollen, roots, stem, trunk, leaves, absorb, nutrients, reproduce, germination, stamen, style	pollen, roots, stem, trunk, leaves, absorb, nutrients, reproduce, germination, stamen, style, light, water, temperature	Photosynthesis, pollen, roots, stem, trunk, leaves, absorb, nutrients, reproduce, germination, stamen, style
<b>Main teaching activity</b> <i>If the school has another short term planning format, this does not need to be included.</i>			
<b>Scaffolding</b>			
<b>Challenge</b>			
<b>Diversity Links</b>			
<b>Catholic Social Teaching Principles</b>	Stewardship – Seeing God in creation	Stewardship – we are stewards of Gods world.	Stewardship – Seeing God in creation
<b>British Values</b>			
<b>Wider links</b>			



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**Science Year 3: Plants (Biology)**

	Lesson 4	Lesson 5	Lesson 6
<b>Learning intention for each lesson</b>	To know what pollination is and how it works	To know how seeds are dispersed	To complete a knowledge quiz.
<b>Recall and Retrieval</b>	What is capillary action? Plant stalks are made up of hollow tubes called xylem. What germination is	Pollination is the transfer of pollen from a male part of a plant to a female part of a plant. This starts fertilisation What the stamen and the stigma are.	
<b>Sequence of substantive knowledge throughout the lesson</b>	Pollination is a very important part of the plant life-cycle.  Pollination is the transfer of pollen from a male part of a plant to a female part of a plant. This starts fertilisation (making a new seed).  Most plants rely on bees and other insects to transport the pollen.	That dispersal talks about how a plant spreads its seeds as far as possible.  That there are different types of seed dispersal.  Plants need to disperse their seeds to survive.  Wind dispersal refers to plants that use the wind to carry their seeds far away.  Burst dispersal refers to plants that have pods full of seeds that burst showering the ground with seeds.  Water dispersal refers to plants that often make very light seeds and grow near water. The seeds float away on the water.  Animal dispersal refers to seeds that are caught on animals and insects that pass by and are then dropped at a later date.	
<b>Key Skills/disciplinary knowledge</b>	<ul style="list-style-type: none"> <li>• asking relevant questions and using different types of scientific enquiries to answer them;</li> <li>• reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions;</li> </ul>	<ul style="list-style-type: none"> <li>• asking relevant questions and using different types of scientific enquiries to answer them;</li> <li>• reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions;</li> <li>• identifying differences, similarities or changes related to simple scientific ideas and processes;</li> </ul>	

	<ul style="list-style-type: none"> <li>identifying differences, similarities or changes related to simple scientific ideas and processes;</li> </ul>		
<b>Key Vocabulary</b>	Photosynthesis, pollen, roots, stem, trunk, leaves, absorb, nutrients, reproduce, germination, stamen, style	insect/wind pollination, seed formation, seed dispersal- wind dispersal, animal dispersal, water dispersal,	Photosynthesis, pollen, insect/wind pollination, seed formation, seed dispersal- wind dispersal, animal dispersal, water dispersal, pollen, roots, stem, trunk, leaves, absorb, nutrients, reproduce, germination, stamen, style
<b>Main teaching activity</b> <i>If the school has another short term planning format, this does not need to be included.</i>			
<b>Scaffolding</b>			
<b>Challenge</b>			
<b>Diversity Links</b>			
<b>Catholic Social Teaching Principles</b>	Stewardship – Seeing God in creation	Stewardship – Seeing God in creation	
<b>British Values</b>			
<b>Wider curriculum links</b>			