St Bernadette's Catholic Primary Voluntary Academy

Science Medium Term Planning - LKS2 Term Lent Cycle B - Journey to Ancient Egypt

	Learning Objective	Activity	Key Knowledge (By the end of the lesson)		Vocabulary (Tier 3)
			Substantive	Disciplinary	
Lesson 1	LO10 To be able to **identify** and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers (NC3).	As an introduction - plants around the world and in different habitats, environments (including the ocean). What do they have in common that makes them a plant? Parts of Plants Children investigate potted plants using magnifying glasses to explore the different parts of a plant, making observational drawings and labelling.	• Know what a plant is. • Know what the different parts of a plant are called. - roots, stem/trunk, leaves, flowers.	**Observing** • Sketch and label a plant using observations	Plant, roots, steam/trunk, leaves, flowers
Lesson 2	LO10 To be able to **identify and describe the functions** of different parts of flowering plants: roots, stem/trunk, leaves and flowers (NC3).	Plant Part Functions Look at and name different flowers. Label the parts. Focus on the function of each part of a flowering plant.	• Know what the different parts of a plant are called. - roots, stem/trunk, leaves, flowers. • Know the functions of the different parts of the plants.		Plant, roots, steam/trunk, leaves, flowers function
Lesson 3 (Linked with Lesson 10)	LO11 To be able to explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant (NC3).	**FULL INVESTIGATION** Investigation Question: What do plants need to grow well? Plan to conduct an **investigation**, to see what happens to seeds and plants in different conditions. For example, a plant in the dark with no water, a plant in the dark with water, a plant in light with no water, a plant in the light with water etc. Varying temperatures and seeds etc	• Know the parts of an investigation	• Plan and set up an investigation. • Make predictions	Light, dark, plants, grown, warmth, water Air, light, water, nutrients, soil, temperature, test, Question, prediction, equipment, measure, observations

		Complete the LKS2 Science investigation planning template and set up investigation **Observations/Measurements etc to be ongoing**			
Lesson 4 LESSON 4 and 5 completed within the same week	LO12 To be able to investigate the way in which water is transported within plants (NC3).	**FULL INVESTIGATION** Transporting Water Question - How is water transported within plants? How can we prove this? Food colouring experiment to explore how water is transported within plants. Complete the LKS2 Science planner and begin the investigation template	• Know that water is transported within plants	**Make systematic and careful observations** • Observe how water is transported through plants.	Transport, water, flower, leaf, stem, roots, experiment, Test, Question, prediction, equipment, measure, observations
Lesson 5	Year 3 Use results to draw simple conclusions and raise further questions. Year 4 Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.	Look at what has happened and use to draw conclusions. Complete investigation write - up	• Know how water is transported through plants.	**Using results** • Use results to draw conclusions on how water is transported through plants	Observations Results conclusion
Lesson 6	LO13 To be able to explore the part that flowers play in the life cycle of flowering plants, including pollination, **seed formation** and seed dispersal (NC3).	Flowering Plant Life Cycle Watch videos and time lapses Label a life cycle of a plant using key words such as germination, roots, leaves etc Label and write sentences describing all parts of the cycle.	• Know the stages of the life cycle of a plant e.g. germination etc.		Germination, roots, leaves, flowering, seeds, life cycle
Lesson 7	LO13 To be able to explore the part that	Pollination	• Know what pollination means.	• Write informatively about pollination	Pollination, life cycle

	flowers play in the life cycle of flowering plants, including **pollination**, seed formation and seed dispersal (NC3).	Explore slides about pollination. Videos, time lapses In groups/pairs/independently, bullet point the stages to pollination. Flowers and Pollination Extended Writing - Information Leaflet	• Know what part of the plant is used during pollination. • Know the steps of the pollination process • Know what animals are pollinators.	including key scientific language.	
Lesson 8	LO13 To be able to explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and **seed dispersal (NC3).**	<u>Seed Dispersal</u> Share slides around seed dispersal. Videos, time lapses. Discuss how important it is and what would happen if seeds couldn't disperse. Sort different types of plants into the different forms of seed dispersal. E.g. sycamore and dandelions into wind etc Extension: Explaining the different ways seeds are dispersed in a written answer.	• Know what seed dispersal means. • Know different types of seed dispersal.	**<u>Questions</u>** • Ask relevant questions and use different types of scientific enquiries to answer them.	Life cycle, seed dispersal, seed formation, wind, eaten by animals, water. Catching a lift
Lesson 9 (Linked with Lesson 3)	Year 3 Use results to draw simple conclusions and raise further questions. Year 4 Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.	**FULL INVESTIGATION** Recap Investigation Question: What do plants need to grow well? Complete investigation - Making use of observations and presenting findings from investigation in drawings, writing explanations of the investigation and using scientific evidence to answer the investigation question. What do you think would happen if a plant did not have these requirements and explain why?	• Know that plants need air, light, water, nutrients from soil, room to grow and time to live and grow.	**<u>Make systematic and careful observations</u>** • Make observations and measurements of plant growth **<u>Using results to draw conclusions</u>** • Draw conclusions on the requirements of plants for life and growth.	Light, dark, plants, grown, warmth, water Air, light, water, nutrients, soil, Observations, Compare Results conclusion
Lesson 10	LO10/13 recap	Scavenger Hunt (Outdoors in either school field or local area) - Opportunity to apply all learning from this term.	• Know the names of and label types of plants.		

		Discuss what kind of plants, flowers or trees you would expect to find. Do you think we will see any examples of pollination or seed dispersal? - why/how? Split the class into groups with a clipboard and explain that children are going to collect/sketch/note down findings to share with the class afterwards. Explanations	• Use knowledge of plants and their life cycles		
Lesson 11	Year 3 L.O. 1 To be able to ask simple, relevant questions and use scientific enquiries to answer them - RESEARCH Year 4 L.O. 1 To be able to ask relevant questions and use different types of scientific enquiries to answer them - RESEARCH	**Plant growth in Egypt - Research question - What plants can be grown in Egypt?** **Discussion around plants growing in different climates. Focus on Egypt - topic link** Research lesson on chromebooks. Recording findings	• Know the names of some plants and where they can be found in Egypt. • Know that plants grew near to the River Nile • Know why plants grew near to the River Nile	**<u>ENQUIRY APPROACH - RESEARCH - Research</u>** • Use different sources to find out about how plants survive in different climates **<u>Recording and presenting findings</u>** • Summarise key facts of what has been found out •	Papyrus, lotus, Crops, fruit crops
Lesson 12	Year 3 L.O. 1 To be able to ask simple, relevant questions and use scientific enquiries to answer them - RESEARCH Year 4 L.O. 1 To be able to ask relevant questions and use different types of scientific enquiries to answer them - RESEARCH	Recap prior lesson. Children to present their findings to the rest of the class. Plenary: Look through knowledge organiser. **END OF TOPIC ASSESSMENT/QUIZ**		**<u>Recording and presenting findings</u>** • Summarise key facts of what has been found out. • Present findings in different ways to others	