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| **Subjects** | **Objectives** | **Skills** | **Activities/ Tasks** |
| Science | 3.1 Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.3.2 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 3.3 Investigate the way in which water is transported within plants3.4 Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal**Working Scientifically**1) - Asking relevant questions and using different types of scientific enquiries to answer them2) - Setting up simple practical enquiries, comparative and fair tests3) - Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers4) Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions5) Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables6) Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions7) Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions8) Identifying differences, similarities or changes related to simple scientific ideas and processes9) Using straightforward scientific evidence to answer questions or to support their findings | **Asking Questions & Planning Enquiries*** Raise their own relevant questions about the world around them
* Should be given a range of scientific experiences including different types of science enquiries to answer questions.
* Start to make their own decisions about the most appropriate type of scientific enquiry they might use to answer questions.

**Testing, Measuring & Recording*** Set up simple practical enquiries, comparative and fair tests.
* Recognise when a simple fair test is necessary and help to decide how to set it up.
* Make systematic and careful observations.
* Help to make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used.
* Take accurate measurements using standard units.
* Collect and record data from their own observations and measurements in a variety of ways: notes, bar charts and tables, standard units, drawings, labelled diagrams, keys and help to make decisions about how to analyse this data.

**Concluding*** Begin to look for naturally occurring patterns and relationships and decide what data to collect to identify them.
* With help, pupils should look for changes, patterns, similarities and differences in their data in order to draw simple conclusions and answer questions.
* Use relevant simple scientific language to discuss their ideas and communicate their findings in ways that are appropriate for different audiences, including oral and written explanations, displays or presentations of results and conclusions.

**Evaluating*** With support, they should identify new questions arising from the data, making predictions for new values within or beyond the data they have collected and finding ways of improving what they have already done.
 | * Identify and describe functions of different parts of flowering plants
	+ Create a diagram labelling parts of a plant (recapping teaching in Year 1 and extending to label male/female parts too)
	+ Discuss functions of different parts of the plant.
		- Investigate this by removing parts of some plants (e.g. leaves and roots) and observe what happens to them in comparison with plants who have had nothing removed)
* Requirements for life and growth
	+ Children to come up with what plants need to grow (drawing on previous learning from KS1)
	+ Children to investigate how different variables affect plant growth. Children to plan investigation (testing, measuring & recording skills)
		- Possible variables: removing air; light; water – too much?; nutrients; room to grow
		- Could grow different types of seeds to compare between plants
* Investigate the way water is transported within plants
	+ Food colouring investigation
		- White flowers in coloured water should turn the flowers and leaves a different colour – children can see the water has travelled up the stem. If no white flowers available, could show this with kitchen roll
	+ Plastic bag on tree
		- Seal a bag around a tree branch. After a week, children should see water in the bag. Explain the water flows through the trunk, along the branch to the leaves. Leaves use water, sunlight and carbon dioxide to make food and some of this water is returned to the air which is what can be seen in the bag.
* Life cycle of flowering plants
	+ Examine inner workings of plants (e.g. daffodil/lily)
	+ Use wotsits as pollen to show how they run onto insects (rub onto fingers)
	+ Role play process of pollination (Nicky Waller page 15)
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| Art | 1. To create sketchbooks to record their observations and use them to review and revisit ideas.
2. To improve their mastery of art and design techniques, including drawing.
3. Learn about great artists in history
 | **Exploring/ Evaluating and developing ideas*** Create sketch books to record their observations and use them to review and revisit ideas
* Select and record from observation, experience and imagination and explore ideas for different purposes
* Question and make thoughtful observations about starting points and select ideas for use in their work
* Begin to use artistic/visual vocabulary to discuss
* Experiment with a wider range of materials
* Think critically about their art and design
* Plan, refine and alter their work as necessary

**Drawing*** Experiment with a range of pencil tones and lines using graded pencils
* Encourage close observation of objects in both the natural and man-made world
* Identify and draw the effect of light (shadows) on a surface, on objects and people
* Introduce the concepts of scale and proportion.
* Use different media (e.g. charcoal, chalk, pastel, crayon, pens, etc.) to achieve variations in line, texture, tone, colour, shape and pattern
 | * Observational drawings of plants
* Focus on Monet looking at recreating his artwork
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| English | See skills progression sheet | * Explanation of the life cycle of a plant
* Instructions on how to care for a plant
* Setting description of an enchanted garden
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