

Working Scientifically Map

Key stage 1 programme of study – Year 1

Working scientifically

Statutory requirements

During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- asking simple questions and recognising that they can be answered in different ways
- observing closely, using simple equipment
- performing simple tests
- identifying and classifying
- using their observations and ideas to suggest answers to questions
- gathering and recording data to help in answering questions.

Year Group: 1

	Term 1 and 2	Term 3 and 4	Term 5 and 6
TOPICS	Ourselves Senses Seasonal Changes	Everyday Materials Seasonal Changes	Plants and Animals (Humans) Seasonal Changes
Types of Enquiry			
Observing (changes) over time	✓ Observe how trees change over time		✓ Planting & observing how a bean seed changes over time
Seeking patterns and relationships	✓ Relationship between body part & sense & relationship between senses	✓ Relationships between properties of materials ✓ Eg. Hard/soft	✓ Herbivores/Carnivores ✓ Types of Teeth
Identifying / grouping /classifying	✓ Grouping foods according to taste ✓ Identifying loud and quiet noises	✓ Grouping materials by their properties	✓ Evergreen & Deciduous trees
Comparative and fair testing		✓ Best fabric for curtains & why	✓ Comparative & fair testing: cress in light & no light.
Researching using secondary sources	✓ Topic Books box	✓ Topic Books box	✓ Topic Books box
SKILLS			

Asking questions	<ul style="list-style-type: none"> ✓ Ourselves ✓ Senses 	<ul style="list-style-type: none"> ✓ Materials 	<ul style="list-style-type: none"> ✓ Plants and Animals
Observing / measuring	<ul style="list-style-type: none"> ✓ Does the tallest person have the biggest feet? ✓ Is the oldest person the tallest? ✓ Measuring heights 	<ul style="list-style-type: none"> ✓ 	<ul style="list-style-type: none"> ✓ Watching bean grow & measuring how tall it is
Planning / designing enquiries			<ul style="list-style-type: none"> ✓ Cress growing plan: ask children ideas about how to plant, where to grow them, watering schedules.
Carrying out tests		<ul style="list-style-type: none"> ✓ Suitable fabric for curtains 	<ul style="list-style-type: none"> ✓ Cress in light & no light
Identifying/ grouping / classifying		<ul style="list-style-type: none"> ✓ What is the object made of? 	<ul style="list-style-type: none"> ✓ Identifying tree types ✓ Carnivores and herbivores ✓ Mammals & not mammals ✓ Amphibians & Reptiles
Gathering / recording data and info	<ul style="list-style-type: none"> ✓ Recording heights of the children ✓ Foot size ✓ Sound walk 	<ul style="list-style-type: none"> ✓ Materials walk 	<ul style="list-style-type: none"> ✓ Keeping a bean diary
Using equipment	<ul style="list-style-type: none"> ✓ Magnifying glasses to see taste buds 	<ul style="list-style-type: none"> ✓ Magnifying glasses to inspect materials 	<ul style="list-style-type: none"> ✓ Magnifying glasses to inspect plants
Reporting / communicating	<ul style="list-style-type: none"> ✓ Taste/smell tests: discussing what they think the food is and whether they like the taste/smell or not. Recording opinions on tables. 	<ul style="list-style-type: none"> ✓ Discuss appropriate materials that are fit for purpose 	<ul style="list-style-type: none"> ✓ Properties of animals
Evaluating Learning	<p>Ourselves - Diagram of body to label – word bank given. At beginning of topic in 1 colour felt tip, end of topic add what they've learnt in a different colour. Senses – post assessment using Dazzle, draw head with eyes, nose, mouth, ears & label senses.</p>	<p>Materials – Post assessment of the curtains for the 3 little pigs house. What material should they use and why. Which materials are not suitable & why.</p>	<p>Plants – label in one colour and then in another colour.</p> <p>Animals – Picture sort before and after.</p>