

Science Activity	Building Skills and Disciplinary Knowledge	Approaches to Developing Skills and Disciplinary Knowledge	Building Substantive Knowledge and Understanding	Approaches to Developing Substantive Knowledge and Understanding	Curricula Materials	Assessed through (T1 T2 T3) Scientific Enquiry Planning & Presenting Critically Observing/ Classifying/ Evaluating Scientific Knowledge		
Scientific Enquiry	<ul> <li>Can use their senses to help them answer questions</li> <li>Can use scientific vocabulary correctly to describe what they have seen and measured</li> <li>Can compare several things using correct scientific terms and vocabulary</li> <li>Can to explore and compare the difference between things that are living, dead and things that have never been alive</li> <li>Can identify that most living things live in habitats that are suited to them and how different habitats provide for basic needs of animals, and plants and how they are dependent on each other</li> </ul>	<ul> <li>Create a topic Mind Map: evidence recall of prior knowledge and skills; evidence short-term recall of learnt skills; evidence questions to explore</li> <li>Introduce and model practical activities involving skills of investigating, contrasting, analysing, recording</li> <li>Make observations</li> <li>Review of investigations against criteria</li> <li>Out of the class room learning experiences to support enquiry</li> </ul>	<ul> <li>Pupils should develop knowledge about the world around them and how they have an impact on that</li> <li>Notice that animals including human, have</li> </ul>	<ul> <li>Iedge about the laround them and they have an ct on that</li> <li>Opportunities for research modelled by Teacher</li> <li>Research opportunities through home/school learning projects</li> <li>Planned opportunities for use of and access to varied resources</li> <li>School visits to places and organisations related to topic and learning</li> <li>School visits to places and organisations related to topic and learning</li> </ul>	TERM1: Most children Animals Including Humans Living Things and	will not yet be a able to a	Some children are confidently able to (exceeding)	
Planning and Presenting	<ul> <li>Can children carry out a simple fair test?</li> <li>Can explain why it may not be fair to compare two things?</li> <li>Can they say whether things happened as they expected?</li> <li>Can they suggest how to find things out?</li> <li>Can they use prompts to find things out things?</li> </ul>	<ul> <li>Teacher led lessons demonstrating skills of investigating, recording, analysing</li> <li>Modelling use of scientific vocabulary in comparisons, contrasts, investigations</li> <li>Planned practical activities to engage children in above activities</li> </ul>	<ul> <li>offspring which grow into adults</li> <li>Find out about and describe the basic needs of animals, including humans, for survival(water, food, air)</li> <li>To begin to have an understanding of the process of reproduction and growth in animals and plants</li> <li>They should understand and use basic subject specific vocabulary related to the science topic</li> <li>Be confident to ask questions and know where to research the answers</li> <li>Confidently use simple scientific equipment to make observations</li> <li>Record and classify findings in simple ways</li> </ul>		Their Habitats			
Critically Observing/Class ification/ Evaluating	<ul> <li>Can organise things into groups</li> <li>Can notice patterns (or associations)</li> <li>Can identify animals and plants</li> <li>Can to suggest more than one way of grouping animals and plants and explain their reasoning using scientific vocabulary</li> </ul>	<ul> <li>Observing changes over time</li> <li>Investigating habitats and environments</li> <li>Learning to compare and contrast</li> <li>Talking about what they have learnt and observed</li> <li>Begin to record data</li> </ul>			TERM2: Plants			
Scientific Knowledge	<ul> <li>Can learn and use the scientific vocabulary related to the topic</li> <li>Can observe, comment and ask questions about the world around them</li> <li>Can learn about change through observations and practical experiences</li> <li>Can, with support, set up an investigation</li> <li>Can begin to gain an understanding of fair testing</li> <li>Can know where to access information (books, internet sources)</li> </ul>	<ul> <li>Planned opportunities to develop skills of observing, investigating and commenting using scientific vocabulary based on topics and experiences</li> </ul>						
Maths links	<ul> <li>Can use pictures, charts, tables to record their observations</li> <li>Can compare objects, plants, animals by size and height</li> <li>Can use simple equipment to measure, e.g. jugs, rulers</li> </ul>	<ul> <li>Planned opportunities depending on topic such as deciding how to present findings via tally counting, graphs, and data analysis or measures</li> </ul>			TERM3: Everyday Materials			
SMSC	<ul> <li>Can work with others of different religious, ethnic and socioeconomic backgrounds, according to given briefs wider knowledge of Y2 science curriculum</li> <li>Can resolve conflicts and differing opinions should these arise</li> <li>Can reflect on choices</li> <li>Can investigate and offer views on ethical issues in topics studied</li> <li>Can show willingness to explore and understand scientific beliefs from a variety of cultural backgrounds</li> <li>Can study science, and investigate with a team knowledge of the wider world, including interviewing with older people, archaeologists, and museum and exhibition personnel</li> </ul>	<ul> <li>Plan visits, opportunities to investigate with a group or partner</li> <li>Plan visits in the local environment Visit Parks, Museums, laboratories</li> </ul>						