



YEAR 1		
Working scientifically 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:	Vocabulary	
<ul> <li>asking simple questions and recognising that they can be answered in different ways</li> <li>observing closely, using simple equipment</li> <li>performing simple tests</li> <li>identifying and classifying</li> <li>using their observations and ideas to suggest answers to questions</li> <li>gathering and recording data to help in answering questions.</li> </ul>	question answer observe observing equipment identify classify sort group record diagram chart map data compare contrast describe biology chemistry physics	

Programme of study, skills and vocabulary					
Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Plants Seasonal change	Seasonal change	Animals including humans Seasonal change	Everyday materials Seasonal change	Revisit Plants Seasonal change	Revisit Animals including humans Seasonal change
		Stor	ries		
	Teaching	g science thro	ough stories	STEM	
<u>story-links-list.pdf</u> <u>Book Lists for Primary Science Topics (booksfortopics.com)</u>					
diverse-representation-in-science-book-corner-suggestions-1.pdf         RSPB: My First Book of Garden Birds       A Little Guide to Wild Flowers         (Mike Unwin and Sarah Whittley)       (Charlotte Voake)					
(Ruth Brown) (4		The Things That I LOVE about TREES (Chris Butterworth)			
•		Harry's Hazelnut (Ruth Parsons)			
SNALL TRAIL         Book of carden         Bits         Bits				rry's fazehut	
	Tree: Seasons Come, Seasons Go     The Great Paper Caper       Patricia Hegarty and Britta Teckentrup)     (Oliver Jeffers)				
One Year with Kipper					





(Mick )	Mick Inkpen) (Pamela Allen)				
	the Storm     The Story of Cinderella       Butterworth)     (Walt Disney)				
	After The Kipper Makketw	The GAEAT PAPER CAPER	Sank the Boat? Pure Adre		
	Job titles				
		stem-careers-by-topic-1.pc			
Seasonal Change	Key objectives Observe changes across the four seasons Observe and describe weather associated with the seasons and how the day length varies	Specific skills Pupils should observe and talk about changes in the weather and the seasons. Pupils might work scientifically by: making tables and charts about the weather; and making displays of what happens in the world around them, including day length, as the seasons change.	Vocabulary season spring summer autumn winter weather hot/ warm cool/ cold sun/ sunny cloud/ cloudy wind/ windy rain/ rainy snow/ snowing hail/ hailing sleet frost fog/ mist ice/ icy rainbow thunder lightning storm light/ dark day/ night		
Season	Big question? Why do leaves change colour?	Famous names/inventions Greta Thunberg TV Weather presenters Dr Steve Lyons (Extreme Weather) Holly Green			
		(Meteorologist)			
Plants	Key objectives Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees	Specific skills Pupils might work scientifically by: observing closely, perhaps using magnifying glasses, and comparing and contrasting familiar plants; describing how they were able to	Vocabulary common wild plants garden plants tree deciduous evergreen trunk branches leaf root plant leaf bud flowers blossom petals root stem fruit vegetables bulb seed		
	Identify and describe the basic structure of a variety of common flowering plants including trees	identify and group them, and drawing diagrams showing the parts of different plants including trees. Pupils might keep records of how plants have changed over time, for example the leaves falling off trees and buds opening; and compare and contrast what they have found out about different plants.			
	Big question? Why are plants alive?	Famous names/inventions Joseph Banks - botanist Local links - Westonbirt - Robert Holford - Victorian horticulturalist <u>History of Westonbirt Arboretum</u> Forestry England Beatrix Potter Author & Botanist			





Animals including humans	Key objectives Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals Identify and name a variety of common animals that are carnivores, herbivores and omnivores Describe and compare the structure of a variety of common animals Identify and name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	Specific skills Pupils might work scientifically by: using their observations to compare and contrast animals at first hand or through videos and photographs, describing how they identify and group them; grouping animals according to what they eat; and using their senses to compare different textures, sounds and smells.	Vocabulary common animals fish amphibians reptiles birds mammals pets carnivores meat cat dog lion tiger fox shark killer whale eagle hawk snake herbivores plants cow hamster guinea pig tortoise omnivores meat and plants badger human bear chickens hear neck arms elbows legs knees face ears eyes hair mouth teeth	
Animals ir	Big question? Why are animal and human bodies different?	Famous names/inventions David Attenborough Steve Backshall Chris Packham Joan Proctor (a herpetologist who designed London Zoo's reptile house) Jane Goodall - the scientist and conservationist who is famous for her work with chimpanzees. Evelyn Glennie - hearing impaired percussionist Stevie Wonder - blind singer songwriter Beatrix Potter Author & Botanist		
Everyday materials	Key objectives Distinguish between and object and the material from which it's made Identify and name a variety of everyday materials including wood, plastic, glass, metal, water and rock Describe the simple physical properties of a variety of everyday materials Compare and group together a variety of everyday materials on the basis of their simple physical properties	Specific skills Pupils should explore, name, discuss and raise and answer questions about everyday materials so that they become familiar with the names of materials and properties. Pupils might work scientifically by: performing simple tests to explore questions, for example: 'What is the best material for an umbrella?for lining a dog basket?for curtains?for a bookshelf? for a gymnast's leotard?'	Vocabulary material wood plastic glass metal water rock properties hard soft stretch stiff shiny dull rough smooth bendy waterproof absorbent brick paper fabrics elastic foil	





Big question? Why are windows made of glass?	Famous scientists/inventions William Addis Toothbrush Inventor	
	Chester Greenwood-Earmuffs	