

Science coverage at Northleaze



	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6	
Our Christian Values	Responsibility	Creativity	Respect	Compassion	Resilience	Friendship	
Year 1	Animals including humans -classify: fish, amphibians, reptiles, birds and mammals - carnivores, herbivores and omnivores		Everyday materials -identify: wood, plastic, glass, metal, water, and rock -describe and compare materials based on physical properties		Plants - deciduous and evergreen - label leaves, flowers petals, roots, bulb, seed, trunk, stem	Seasonal changes -the four seasons -the weather linked to the seasons and how day length changes	
Working Scientifically	Ask simple questions and recognise they can be answered in different ways. Observe closely using simple equipment. Perform simple tests. Identify and classify. Use observations and ideas to suggest answers to questions. Gather and record data to help answer questions.						
Additional Experiences	Bristol	Bristol zoo visit? Explorer dome - environment					
Year 2	Animals including humans -animal offspring -that animals need water, food and air -importance of healthy food and exercise for humans.		Use of everyday materials -Identify and compare the suitability of materials for different uses. -manipulating solid objects (squashing, bending, twisting)		Plants -how seeds and bulbs grow -discover what plants need to grow healthy	Living things and their habitats -things that are living, dead and have never been alive -habitats -simple food chains	
Working Scientifically	Ask simple questions and recognise they can be answered in different ways. Observe closely using simple equipment. Perform simple tests. Identify and classify. Use observations and ideas to suggest answers to questions. Gather and record data to help answer questions.						
Additional Experiences		Chicks (hatching and rearing – approx. 2 weeks)	Explorer dome - environment				
Year 3	Animals including humans -nutrition for animals and humans -skeletons and muscles	Light -why we need light -that darkness is the absence of light -light reflects -that the sun can be dangerous -how shadows are formed and how they change	Rocks -compare properties of rocks -how fossils are formed -that soils are made from rocks	Forces and Magnets -how things move on different surfaces -magnetic forces act at a distance -magnets: attracting, repelling, the poles and which objects are magnetic	Plants -Functions of: roots, flower, leaves, stem -requirements of different plants -how water is transported through plants -pollination and seeds		
Working Scientifically	Ask relevant questions and use different types of scientific equipment to answer them. Set up simple practical enquiries, comparative and fair tests. Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment including thermometers and data loggers. Gather, record, classify and present data in a variety of ways to help answer questions. Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables. Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. Identify differences, similarities or changes related to simple scientific ideas and processes. Use straightforward scientific evidence to answer questions or to support their findings.						



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Additional Experiences			Handling real fossils at Wookey Hole	Explorer dome - forces	Growing and planting in school. Stemazing Inspiration Academy programme – 6 live online STEM sessions		
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Our Christian Values	Responsibility	Creativity	Respect	Compassion	Resilience	Friendship	
Year 4	Sound -how sounds are made -how vibrations travel -pitch and volume	Electricity -appliances that use electricity -simple series circuits (cell, wires, bulbs, switches and buzzers) -switches -conductors and insulators	States of matter -solids, liquids and gasses -changing states when heated or cooled (degrees Celsius) -evaporation, condensation and the water cycle		Animals including humans -digestive system -types of teeth -food chains, predators and prey	Living things and their habitats -grouping living things -use classification keys -environmental changes and dangers	
Working Scientifically	Ask relevant questions and use different types of scientific equipment to answer them. Set up simple practical enquiries, comparative and fair tests. Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment including thermometers and data loggers. Gather, record, classify and present data in a variety of ways to help answer questions. Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables. Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. Identify differences, similarities or changes related to simple scientific ideas and processes. Use straightforward scientific evidence to answer questions or to support their findings.						
Additional Experiences			Explorer dome –	states of matter		Planting and growing in school/visit to Long Ashton allotments	
Year 5	Light -that light travels in straight lines -how we see -how light travels -how light effects how shadows are formed and the shape of them	Earth and Space -movement of the Earth and planets relative to the sun -movement of the moon relative to the Earth -the Earth's rotation and day and night	-gravity -air resistance, water resistance -mechanisms, leavers, pulleys a		Living things and their habitats -differences in the life cycles of: mammals, amphibians, insects and birds -reproduction in plants and animals	Animals including humans -changes as humans develop to old age	
Working Scientifically	Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. Use test results to make predictions to set up further comparative and fair tests. Report and present findings from enquiries, including conclusions, causal relationships and explanations of degree of trust in results, in oral and written forms such as displays or other presentations. Identify scientific evidence that has been used to support or refute ideas or arguments.						
Additional Experiences			Badminton Science sho	ow (chemistry content)	Growing and planting in school		



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Key:	Biology	Chemistry	Physics
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	Animals including humans	Evolution and inheritance	Properties and Changes of Materials	Electricity	Living things and their	
	-circulatory system	-the information that fossils	-compare materials based on: hardness, solubility,	-associate brightness	habitats	
Year 6	-impact of diet, exercise and	provide	transparency, conductivity, and response to magnets	or lamp or volume of	-detailed classification	
	drugs on function of bodies	-variation and adaptation	-dissolving, liquids and solutions	buzzers with voltage	of micro-organisms,	
	-describe how nutrients and		-filtering, evaporating, sieving	and number of cells	animals and plants	
	water are transported in		-fair tests	-changes in brightness	-give reasons for	
	animals		-reversible and irreversible changes	of bulbs and loudness	classification based on	
				of buzzers	characteristics	
				-use symbols to draw		
				circuit diagrams		
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Working	equipment, with increasing accuracy and precision, taking repeat readings when appropriate. Record data and results of increasing complexity using scientific diagrams and labels,					
•	classification keys, tables, scatter graphs, bar and line graphs. Use test results to make predictions to set up further comparative and fair tests. Report and present findings from					
Scientifically	enquiries, including conclusions, causal relationships and explanations of degree of trust in results, in oral and written forms such as displays or other presentations. Identify					
	scientific evidence that has been used to support or refute ideas or arguments.					
Additional			Explorer dome – states of matter			
Experiences						