

Science Progression - Freshford Church School

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Science	Year		G & BTS	Ashe	Mill	Joyce
Autumn	A	<i>Where is Home?</i>	Seasonal change - observe changes across the seasons - observe and describe weather associated with the seasons and how day length varies Everyday materials: Distinguish between an object and the material from which it is 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	Animals including humans: - nutrition and digestive system (Y3 and Y4) - function of teeth (Y4) - skeleton and muscles (Y3) Forces and Magnets (Y3): - Contact vs non-contact forces - Magnets -attract-repel - Gravity	Forces (Y5): - Gravity - Air resistance, water resistance and friction - Simple machines - levers, pulleys and gears Properties and changes of materials (Y5): - Group materials based on hardness, solubility, transparency, conductivity and response to magnets - Materials that dissolve to form solutions - Separation of mixtures using filtering, sieving and evaporation - Reversible and irreversible changes.	Animals including humans: - human circulatory system - Impact of diet, exercise, drugs and lifestyle on the way their body functions.

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	B	<i>Are we born to explore?</i>	Properties and uses of materials: 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 Uses of everyday materials (Y2): Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses Find out how the shapes of solid objects made from some materials can be changed by squashing,	Animals including humans: • nutrition and digestive system (Y3 and Y4) • function of teeth (Y4) • skeleton and muscles (Y3) Forces and Magnets (Y3): • contact vs non-contact forces • Magnets -attract-repel • Gravity • Friction on different surfaces	Forces (Y5): • Friction forces • Simple machines - levers, pulleys and gears Properties and changes of materials (Y5): • Group materials based on hardness, solubility, transparency, conductivity and response to magnets • Materials that dissolve to form solutions • Separation of mixtures using filtering, sieving and evaporation • Reversible and irreversible changes.	Animals including humans (Y6): • Human circulatory system • Impact of diet, exercise, drugs and lifestyle on the way their body functions.
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			bending, twisting and stretching Seasonal Change: • observe changes across the seasons • observe and describe weather associated with the seasons and how day length varies Living things and their habitats Plants: variety, structure, needs, identify, name, describe			
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Spring	A	What is a museum?	Living things and their habitats:	Plants (Y3):	Animals including humans (Y5):	Living things and their habitats (Y6):
			Evolution and inheritance(Y6):			
			Observations and pictures of plants and animals	• Identify and describe the functions of different parts of the flowering plant	• Describe the changes as humans develop to old age.	• Classification of plants and animals (Linnaeus)
			Variety, parts, needs, food chains	• requirements for life and growth		
			Plants:	• pollination, seed dispersal	Electricity (Y5):	
			variety, structure, needs, identify, name, describe	• The life cycle of the flowering plant	• Electrical circuits	
			Contrasting environments (YR)		• Circuits and switches	
			Senses	States of matter (Y4)	• Conductors and insulators	
				• Compare and group materials, according to whether they are solid, liquid or gases		• Living things have changed over time and fossils as evidence of life millions of years ago.
				• Changing state of materials		• Living things produce offspring of the same kind with reference and sensitivity to different families and ways of creating an embryo, eg. sperm/egg donations, surrogacy, adoption, etc
				• The water cycle - evaporation and condensation		• Adaptation of plants and animals to their environment. Evolution by natural selection - Darwin.

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	B <i>Who can change the World?</i> <i>What makes a revolutionary?</i>	Seasonal change: changes, weather, day length Animals including humans: Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	Plants (Y3): - Identify and describe the functions of different parts of the flowering plant - requirements for life and growth - pollination, seed dispersal - The life cycle of the flowering plant States of matter (Y4) - Compare and group materials, according to whether they are solid, liquid or gases - Changing state of materials - The water cycle - evaporation and condensation	Animals including humans (Y5): - Describe the changes as humans develop to old age. Electricity (Y5): - Electrical circuits - Circuits and switches - Conductors and insulators	Living things and their habitats (Y6): - Classification of plants and animals (Linnaeus) Evolution and inheritance(Y6): - Living things have changed over time and fossils as evidence of life millions of years ago. - Living things produce offspring of the same kind with reference and sensitivity to different families and ways of creating an embryo, eg. sperm/egg donations, surrogacy, adoption, etc - Adaptation of plants and animals to their environment. Evolution by natural selection - Darwin.
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Summer	A	How can we protect our planet? What does it mean to be an environmentalist?	YR: changing states of matter Properties of Everyday Materials: 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 Uses of everyday materials (Y2): Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses Find out how the shapes of solid objects made from	Light (Y3): • Light and dark – need light to see and absence of • Reflective materials – light is reflected from surfaces • Dangers of sunlight • Investigating shadows Rocks (Y3): • Appearance and properties • Fossil formation • Soil formation	Living things and their habitats: • Explore and use classification keys (Y4) • Identify living things in local and wider environment (Y4) • Environmental changes and the dangers to living things (Y4) • lifecycles of mammal, insect, amphibian, bird (Y5) Animals including humans (Y4): • food chains/webs Sound (Y4): • How sounds are produced – association with something vibrating • Recognising that sounds travel through mediums • Exploring patterns between the pitch of a sound and the features of the object that produced it	Earth and Space (Y5): • Movement of the Earth and other planets relative to the sun • Movement of the sun, Earth and moon as spherical bodies • solar system and rotation of the Earth to explain day and night Light (Y6): • Light travels in straight lines. • How we see objects. • Explaining shadows RSE and Health Education (Y6)
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			some materials can be changed by squashing, bending, twisting and stretching Animals: variety, parts, needs, food chains		• Sounds over distance	
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	B	<i>What does Shakespeare teach us about being a community?</i> 2016/2022/28 <i>What can Shakespeare teach us about who we can become?</i> 2018/2024/2030 <i>What can Shakespeare teach us about freedom?</i> 2020/2026/2032	Contrasting environments: Comparing environments considering human and physical features Seasons and weather: - observe changes across the seasons - observe and describe weather associated with the seasons and how day length varies Living things and their habitats: Observations and pictures of plants and animals variety, parts, needs, food chains Plants: variety, structure, needs, identify, name, describe	Light (Y3): - Light and dark - need light to see and absence of - Reflective materials - light is reflected from surfaces - Dangers of sunlight - Investigating shadows Rocks (Y3): - Appearance and properties - Fossil formation - Soil formation	Living things and their habitats: - Explore and use classification keys (Y4) - Identify living things in local and wider environment (Y4) - lifecycles of mammal, insect, amphibian, bird (Y5) Animals including humans (Y4): - food chains/webs Sound (Y4): - How sounds are produced - association with something vibrating - Recognising that sounds travel through mediums - Exploring patterns between the pitch of a sound and the features of the object that produced it - Sounds over distance	Earth and Space (Y5): - Movement of the Earth and other planets relative to the sun - Movement of the sun, Earth and moon as spherical bodies - solar system and rotation of the Earth to explain day and night Light (Y6): - Light travels in straight lines. - How we see objects. - Explaining shadows RSE and Health Education
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