Science Progression Document
Abbot's Hall Community Primary School

Subject Strand: Animals Including humans (including Y6 Evolution and Inheritance)

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Substantive knowledge	Personal, Social and Emotional Development Understanding The World 3 and 4 year olds Continue developing positive attitudes about the differences between people. Reception Describe what they see, hear and feel whilst outside. 3 and 4 year olds Understand the key features of the life cycle of a plant and an animal. Manage their own needs: Personal hygiene Know and talk about the different factors that support their overall health and wellbeing: regular physical activity, healthy eating, toothbrushing, sensible amounts of 'screen time', having a good sleep routine, being a safe pedestrian.	identify and name a variety of common animals including fish, amphibians, reptiles, birds andmammals describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets) identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	notice that animals, including humans, have offspring which grow into adults find out about and describe the basic needs of animals, including humans, for survival (water, food and air) describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene	identify that humans and some other animals have skeletons and muscles for support, protection and movement identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat ***(Rocks)*** describe in simple terms how fossils are formed when things that have lived are trapped within rock-Progression to Y6 evolution and inheritance	construct and interpret a variety of food chains, identifying producers, predators and prey describe the simple functions of the basic parts of the digestive system in humans identify the different types of teeth in humans and their simple functions	describe the changes as humans develop to old age ***(Living things and their habitats)*** describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.	identify and name the mainparts of the human circulatory system, and describe the functions of the heart, blood vessels andblood describe the ways in which nutrients and water are transported within animals, including humans recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function describe the ways in which nutrients and water are transported within animals, including humans ***(Evolution and inheritance)*** recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents

Disciplinary		asking simple questions and recognising that they can be answered in different ways performing simple tests observing closely, using simple equipment using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions identifying and classifying	asking simple questions and recognising that they can be answered in different ways performing simple tests observing closely, using simple equipment using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions identifying and classifying	asking relevant questions and using different types of scientific enquiries to answer them setting up simple practical enquiries, comparative and fair tests making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers gathering, recording, classifying and presenting data in a variety of ways to help in answering questions recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions	asking relevant questions and using different types of scientific enquiries to answer them setting up simple practical enquiries, comparative and fair tests making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers gathering, recording, classifying and presenting data in a variety of ways to help in answering questions recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions	planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary using test results to make predictions to set up further comparative and fair tests taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments	planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary using test results to make predictions to set up further comparative and fair tests taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments

				identifying differences, similarities or changes related to simple scientific ideas and processes using straightforward scientific evidence to answer questions or to support their findings.	identifying differences, similarities or changes related to simple scientific ideas and processes using straightforward scientific evidence to answer questions or to support their findings.		
Vocabulary		Fish, Reptiles, Mammals, Birds, Amphibians (+ examples of each) Herbivore, Omnivore, Carnivore, Leg, Arm, Elbow, Head, Ear, Nose, Back, Wings, Beak Touch, taste, sight, smell, hear	Survival, Water, Air, Food, Adult, Baby, Offspring, Exercise, Hygiene Examples of animal offspring e.g. Kitten, Calf, Puppy	Movement, Muscles, Bones, Skull, Nutrition, Skeletons Protection, Movement	Mouth, Tongue, Teeth, Oesophagus, Stomach, Small Intestine, Large Intestine, Canine, Incisor, Molar	Foetus, Embryo, Womb, Gestation, Baby, Toddler, Teenager, Elderly, Growth, Development, Puberty	Circulatory, Heart, Blood Vessels, Veins, Arteries, Oxygenated, Deoxygenated, Valve, Exercise, Respiration

Science Progression Document
Abbot's Hall Community Primary School

Subject Strand: Plants

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Substantive knowledge	EYFS: **3 and 4 year olds** Understand the key features of the life cycle of a plant and an animal. EYFS: **3 and 4 year olds** Plant seeds and care for growing plants.	identify and name a variety of common wild and garden plants, including deciduous and evergreen trees identify and describe the basic structure of a variety of common flowering plants, including trees	observe and describe how seeds and bulbs grow into mature plants find out and describe how plants need water, light and a suitable temperature to grow and stay healthy	identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers investigate the way in which water is transported within plants explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant			

Disciplinary	.	asking simple questions and recognising that they can be answered in different ways performing simple tests observing closely, using simple equipment using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions identifying and classifying	asking simple questions and recognising that they can be answered in different ways performing simple tests observing closely, using simple equipment using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions identifying and classifying	asking relevant questions and using different types of scientific enquiries to answer them setting up simple practical enquiries, comparative and fair tests making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers gathering, recording, classifying and presenting data in a variety of ways to help in answering questions recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions			

				identifying differences, similarities or changes related to simple scientific ideas and processes using straightforward scientific evidence to answer questions or to support their findings.			
Vocabulary		Deciduous, Evergreen trees, Leaves, Flowers (blossom), Petals, Fruit, Roots, Bulb, Seed, Trunk, Branches, Stem	Seeds, Bulbs, Water, Light, Temperature, Growth	Air, Light, Water, Nutrients, Soil, Reproduction, Transportation, Dispersal, Pollination, Flower			

Science Progression Document
Abbot's Hall Community Primary School

Subject Strand: Materials

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Substantive knowledge	Understanding The World: 3 and 4 year olds Use all their senses in hands-on exploration of natural materials. Explore collections of materials with similar and/or different properties. Talk about what they see, using a wide vocabulary. Understanding The World: 3 and 4 year olds Talk about the differences between materials and changes they notice.	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	identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses 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	Rocks-compare and group together different kinds of rocks on the basis of their appearance and simple physical properties	States of matter- compare and group materials together, according to whether they are solids, liquids or gases States of matter- identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature	Properties and changes of materials: give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic Properties and changes of materials: compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets Y5 Properties and changes of materials: explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda demonstrate that dissolving, mixing and changes of state are reversible changes know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating	*Y6 Evolution and inheritance:* recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago)

Disciplinary		asking simple questions and recognising that they can be answered in different ways performing simple tests observing closely, using simple equipment using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions identifying and classifying	asking simple questions and recognising that they can be answered in different ways performing simple tests observing closely, using simple equipment using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions identifying and classifying	asking relevant questions and using different types of scientific enquiries to answer them setting up simple practical enquiries, comparative and fair tests making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers gathering, recording, classifying and presenting data in a variety of ways to help in answering questions recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions	asking relevant questions and using different types of scientific enquiries to answer them setting up simple practical enquiries, comparative and fair tests making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers gathering, recording, classifying and presenting data in a variety of ways to help in answering questions recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions	planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary using test results to make predictions to set up further comparative and fair tests taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments	planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary using test results to make predictions to set up further comparative and fair tests taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments

				identifying differences, similarities or changes related to simple scientific ideas and processes using straightforward scientific evidence to answer questions or to support their findings.	identifying differences, similarities or changes related to simple scientific ideas and processes using straightforward scientific evidence to answer questions or to support their findings.		
Vocabulary		Wood, Plastic, Glass, Paper, Water, Metal, Rock, Hard, Soft, Bendy, Rough, Smooth	Hard, Soft, Stretchy, Stiff, Shiny, Dull, Rough, Smooth, Bendy, Waterproof, Absorbent, Opaque, Transparent Squashing, Bending, Twisting, Stretching	Fossils, Soils, Sandstone, Granite, Marble, Pumice, Absorbent	Solid, Liquid, Gas, Evaporation, Condensation, Particles, Temperature, Freezing, Heating	Hardness, Solubility, Transparency, Conductivity, Magnetic, Filter, Evaporation, Dissolving, Mixing	Fossils, Adaptation, Evolution, Characteristics, Reproduction, Genetics

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Abbot's Hall Community Primary School

Subject Strand: Living things and their habitats

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Substantive knowledge	Understanding The World **Reception:** recognise some environments that are different from the one in which they live.		identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other identify and name a variety of plants and animals in their habitats, including microhabitats describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food		recognise that environments can change and that this can sometimes pose dangers to livingthings recognise that living things can be grouped in a variety of ways explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment	describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird describe the life process of reproduction in some plants and animals	describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals give reasons for classifying plants and animals based on specific characteristics

Disciplinary		asking simple questions and recognising that they can be answered in different ways performing simple tests observing closely, using simple equipment using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions identifying and classifying	asking simple questions and recognising that they can be answered in different ways performing simple tests observing closely, using simple equipment using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions identifying and classifying	asking relevant questions and using different types of scientific enquiries to answer them setting up simple practical enquiries, comparative and fair tests making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers gathering, recording, classifying and presenting data in a variety of ways to help in answering questions recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions	asking relevant questions and using different types of scientific enquiries to answer them setting up simple practical enquiries, comparative and fair tests making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers gathering, recording, classifying and presenting data in a variety of ways to help in answering questions recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions	planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary using test results to make predictions to set up further comparative and fair tests taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments	planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary using test results to make predictions to set up further comparative and fair tests taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments

				identifying differences, similarities or changes related to simple scientific ideas and processes using straightforward scientific evidence to answer questions or to support their findings.	identifying differences, similarities or changes related to simple scientific ideas and processes using straightforward scientific evidence to answer questions or to support their findings.		
Vocabulary			Living, Dead, Alive, Habitat, Energy, Food chain, Predator, Prey, Woodland, Pond, Desert		Fish, Amphibians, Reptiles, Birds, Mammals, Invertebrate, Vertebrate Worms, Spiders, Insects, Environment, Habitats	Mammal, Reproduction, Insect, Amphibian, Bird, Offspring	Classification, Vertebrates, Invertebrates, Micro-organisms, Amphibians, Reptiles, Mammals, Insects

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Abbot's Hall Community Primary School

Subject Strand: Forces and Magnets

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Substantive knowledge	3 and 4 year olds: explore and talk about different forces they can feel explore how things work			compare how things move on different surfaces notice that some forces need contact between 2 objects, but magnetic forces can act at a distance observe how magnets attract or repel each other and attract some materials and not others compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials describe magnets as having 2 poles predict whether 2 magnets will attract or repel each other, depending on which poles are facing		explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object identify the effects of air resistance, water resistance and friction, that act between moving surfaces recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect	

Disciplinary				asking relevant questions and using different types of scientific enquiries to answer them setting up simple practical enquiries, comparative and fair tests making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers gathering, recording, classifying and presenting data in a variety of ways to help in answering questions recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions		planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary using test results to make predictions to set up further comparative and fair tests taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments	

				identifying differences, similarities or changes related to simple scientific ideas and processes using straightforward scientific evidence to answer questions or to support their findings.			
Vocabulary				Magnetic, Force, Attract, Repel, Friction, Poles, Push, Pull		Air resistance, Water resistance, Friction, Gravity, Newton, Gears, Pulleys	

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Abbot's Hall Community Primary School

Subject Strand: Electricity

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Substantive knowledge					identify common appliances that run on electricity construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit recognise some common conductors and insulators, and associate metals with being good conductors		associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches use recognised symbols when representing a simple circuit in a diagram

Disciplinary				.	asking relevant questions and using different types of scientific enquiries to answer them setting up simple practical enquiries, comparative and fair tests making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers gathering, recording, classifying and presenting data in a variety of ways to help in answering questions recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions		planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary using test results to make predictions to set up further comparative and fair tests taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments

					identifying differences, similarities or changes related to simple scientific ideas and processes using straightforward scientific evidence to answer questions or to support their findings.		
Vocabulary					Cells, Wires, Bulbs, Switches, Buzzers, Battery, Circuit, Series, Conductors, Insulators		Cells, Wires, Bulbs, Switches, Buzzers, Battery, Circuit, Series, Conductors, Insulators, Amps, Volts, Cell

Science Progression Document
Abbot's Hall Community Primary School

Subject Strand: Light

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Substantive knowledge				recognise that they need light in order to see things and that dark is the absence of light notice that light is reflected from surfaces recognise that light from the sun can be dangerous and that there are ways to protect their eyes recognise that shadows are formed when the light from a light source is blocked by an opaque object find patterns in the way that the size of shadows change			recognise that light appears to travel in straight lines use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them

Disciplinary				asking relevant questions and using different types of scientific enquiries to answer them setting up simple practical enquiries, comparative and fair tests making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers gathering, recording, classifying and presenting data in a variety of ways to help in answering questions recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions			planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary using test results to make predictions to set up further comparative and fair tests taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments

				identifying differences, similarities or changes related to simple scientific ideas and processes using straightforward scientific evidence to answer questions or to support their findings.			
Vocabulary				Light, Shadows, Mirror, Reflective, Dark, Reflection			Refraction, Reflection, Light, Spectrum, Rainbow, Colour

Subject Strand: Sound

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Substantive knowledge	Understanding the world Reception: Describe what they see, hear and feel whilst outside. Expressive arts and design 3 and 4 year olds: Listen with increased attention to sounds. Respond to what they have heard, expressing their thoughts and feelings.				identify how sounds are made, associating some of them withsomething vibrating recognise that vibrations from sounds travel through a mediumto the ear find patterns between the pitch of a sound and features of the object that produced it find patterns between the volume of a sound and the strength of		

					the vibrations that produced it recognise that sounds get fainter as the distance from the sound source increases		
Disciplinary					asking relevant questions and using different types of scientific enquiries to answer them setting up simple practical enquiries, comparative and fair tests making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers gathering, recording, classifying and presenting data in a variety of ways to help in answering questions recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions		

					using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions identifying differences, similarities or changes related to simple scientific ideas and processes using straightforward scientific evidence to answer questions or to support their findings.		
Vocabulary					Volume, vibration, wave, pitch, tone, speaker		

Subject Strand: Seasonal Changes and Earth and Space

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Substantive knowledge	Understanding The World Reception: Explore the natural world around them. Understand the effect of changing seasons on the natural world around them.	observe changes across the 4 seasons observe and describe weather associated with the seasons and how day length varies				describe the movement of the Earth and other planetsrelative to the sun in the solar system describe the movement ofthe moon relative to the Earth describe the sun, Earth andmoon as approximately spherical bodies	

						use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun acrossthe sky	
Disciplinary		asking simple questions and recognising that they can be answered in different ways performing simple tests observing closely, using simple equipment using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions identifying and classifying				planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary using test results to make predictions to set up further comparative and fair tests taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs reporting and presenting findings from enquiries, including conclusions, causal relationships	

						and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments	
Vocabulary		Summer, Spring, Autumn, Winter, Sun, Day, Moon, Night, Light, Dark				Earth, Sun, Moon, Axis, Rotation, Day, Night, Phases of the Moon, star, constellation	