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Red writing is the year specific working scientifically skill.

Years 4 - 6
Science 3 year rolling curriculum

		Knowledge statements *(taught to everyone)*	Working scientifically statements *(Year group specific)*
A **2023-2024**	**Term 1**	**Living things and their habitats** Recognise that living things can be grouped in a variety of ways. (Living things and their habitats) 4 Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. (Living things and their habitats) 4 Give reasons for classifying plants and animals based on specific characteristics. (Living things and their habitats) 6	**Y4-** Gather, record, classify and present data in a variety of ways to help in answering questions. **Y5- Consolidate Y4** **Y6-** Group and classify things and recognise patterns.
	Term 2	**Animal including humans** Describe the ways in which nutrients and water are transported within animals, including humans. (Animals, including humans) 6 Identify the different types of teeth in humans and their simple functions. (Animals, including humans) 4	**Y4-** Ask relevant questions and use different types of scientific enquiries to answer them. **Y5-** Identify scientific evidence that has been used to support or refute ideas or arguments. **Y6-** Find things out using a wide range of secondary sources of information.

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	Term 3	**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. (Evolution and inheritance) 6 Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. (Evolution and inheritance)6 Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. (Evolution and inheritance) 6	**Y4-** Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions **Y5-** Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations **Y6-** Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
	Term 4	**Electricity** Identify common appliances that run on electricity. (Electricity) 4 Recognise some common conductors and insulators, and associate metals with being good conductors. (Electricity)4	**Y4-** Set up simple practical enquiries, comparative and fair tests. **Y5-** Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary **Y6-** Use test results to make predictions to set up further comparative and fair tests
	Term 5	Materials Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic. (Materials)5 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. (Materials)5	**Y4-** Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions **Y5- Consolidate Y4** **Y6-** Use appropriate scientific language and ideas from the national curriculum to explain, evaluate and communicate his/her methods and findings.

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	Term 6	**Forces and magnets** Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. (Forces and magnets) 5	**Y4-** Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables **Y5-** Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs **Y6-** Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs

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		Knowledge statements *(taught to everyone)*	**Working scientifically statements** *(Year group specific)*
B 2024-2025	**Term 1**	**Animal including humans** Describe the simple functions of the basic parts of the digestive system in humans. (Animals, including humans)4 Describe the changes as humans develop to old age. (Animals, including humans)5 Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. (Animals, including humans)6	**Y4-** Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions **Y5- -** Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations **Y6-** Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
	Term 2	**States of matter** Compare and group materials together, according to whether they are solids, liquids or gases. (States of matter) 4 Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C). (States of matter) 4 Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. (States of matter)	**Y4-** Gather, record, classify and present data in a variety of ways to help in answering questions. **Y5- Consolidate Y4** **Y6-** Group and classify and recognise patterns.
	Term 3	**Earth and space**	

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		Describe the movement of the Earth, and other planets, relative to the Sun in the solar system. (Earth and space) 5 Describe the movement of the Moon relative to the Earth. (Earth and space) Describe the Sun, Earth and Moon as approximately spherical bodies. (Earth and space) Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky. (Earth and space)	**Y4-** Identify differences, similarities or changes related to simple scientific ideas and processes **Y5- Consolidate y4** **Y6-** Identify scientific evidence that has been used to support or refute ideas or arguments
	Term 4	**Forces and magnets** Identify the effects of air resistance, water resistance and friction, that act between moving surfaces. (Forces and magnets) 5 Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. (Forces and magnets) 5	**Y4-** Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers **Y5-** Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate (Year 5 focus). (Working Scientifically) **Y6-** Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
	Term 5	**Electricity** Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. (Electricity) 4 Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. (Electricity) 4	**Y4-** Set up simple practical enquiries, comparative and fair tests **Y5-** Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary **Y6-** Use test results to make predictions to set up further comparative and fair tests

		Use recognised symbols when representing a simple circuit in a diagram. (Electricity) 6	
	Term 6	**Living things and their habitats**	
		Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. (Living things and their habitats) 5 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. (Living things and their habitats)6	

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		Knowledge statements *(taught to everyone)*	**Working scientifically statements** *(Year group specific)*
C 2025-2026	**Term 1**	**Materials** Recognise that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution. (Materials) Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating. (Materials) Demonstrate that dissolving, mixing and changes of state are reversible changes. (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. (Materials)	**Y4-** Ask relevant questions and use different types of scientific enquiries to answer them **Y5-** Use test results to make predictions to set up further comparative and fair tests **Y6-** Plan different types of scientific enquiries to answer their own or others' questions, including recognising and controlling variables where necessary
	Term 2	**Light** Recognise that light appears to travel in straight lines. (Light) 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. (Light) 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. (Light) Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. (Light)	**Y4-** Identify differences, similarities or changes related to simple scientific ideas and processes **Y5-** Consolidate y4 **Y6-** Identify scientific evidence that has been used to support or refute ideas or arguments
	Term 3	**Electricity**	

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		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. (Electricity)4 Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. (Electricity) 6 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. (Electricity) 6	**Y4-** Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions **Y5- Consolidate Y4** **Y6-** Use appropriate scientific language and ideas from the national curriculum to explain, evaluate and communicate his/her methods and findings.
	Term 4	**Sound** Identify how sounds are made, associating some of them with something vibrating. (Sound) Recognise that vibrations from sounds travel through a medium to the ear. (Sound) Find patterns between the pitch of a sound and features of the object that produced it. (Sound) Find patterns between the volume of a sound and the strength of the vibrations that produced it. (Sound) Recognise that sounds get fainter as the distance from the sound source increases. (Sound)	**Y4-** Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables **Y5-** Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs **Y6-** Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graph
	Term 5	**Animals including humans**	**Y4-** Set up simple practical enquiries, comparative and fair tests

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		Construct and interpret a variety of food chains, identifying producers, predators and prey. (Animals, including humans) 4 Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. (Animals, including humans) 6	**Y5-** Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary **Y6-** Use test results to make predictions to set up further comparative and fair tests
	Term 6	**Living things and their habitats** Describe the life process of reproduction in some plants and animals. (Living things and their habitats)5 Recognise that environments can change and that this can sometimes pose dangers and have an impact on living things. (Living things and their habitats)4	**Y4-** Use straightforward scientific evidence to answer questions or to support his/her findings **Y5-** Identify scientific evidence that has been used to support or refute ideas or arguments **Y6-** Describe and evaluate their own and other people's scientific ideas related to topics in the national curriculum (including ideas that have changed over time), using evidence from a range of sources.

Year 4	Year 5	Year 6
Working scientifically objectives		
Ask relevant questions and use different types of scientific enquiries to answer them (Year 4 focus). (Working Scientifically)	Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary (Year 5 focus). (Working Scientifically)	Use test results to make predictions to set up further comparative and fair tests (Year 6 focus). (Working Scientifically)
Set up simple practical enquiries, comparative and fair tests (Year 4 focus). (Working Scientifically)	Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate (Year 5 focus). (Working Scientifically)	Use appropriate scientific language and ideas from the national curriculum to explain, evaluate and communicate his/her methods and findings. (Working Scientifically)
Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers (Year 4 focus). (Working Scientifically)	Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs (Year 5 focus). (Working Scientifically	Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate (Year 6 focus). (Working Scientifically)
Gather, record, classify and present data in a variety of ways to help in answering questions (Year 4 focus). (Working Scientifically)	Use test results to make predictions to set up further comparative and fair tests (Year 5 focus). (Working Scientifically)	Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations (Year 6 focus). (Working Scientifically)
Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables (Year 4 focus). (Working Scientifically)	Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations (Year 5 focus). (Working Scientifically)	Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs (Year 6 focus). (Working Scientifically)

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Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions (Year 4 focus). (Working Scientifically	Identify scientific evidence that has been used to support or refute ideas or arguments (Year 5 focus). (Working Scientifically)	Plan different types of scientific enquiries to answer their own or others' questions, including recognising and controlling variables where necessary (Year 6 focus). (Working Scientifically)
Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions (Year 4 focus). (Working Scientifically)		Identify scientific evidence that has been used to support or refute ideas or arguments (Year 6 focus). (Working Scientifically)
Identify differences, similarities or changes related to simple scientific ideas and processes (Year 4 focus). (Working Scientifically)		Group and classify things and recognise patterns. (Working Scientifically)
Use straightforward scientific evidence to answer questions or to support his/her findings (Year 4 focus). (Working Scientifically)		Find things out using a wide range of secondary sources of information. (Working Scientifically)
		Describe and evaluate their own and other people's scientific ideas related to topics in the national curriculum (including ideas that have changed over time), using evidence from a range of sources. (Working Scientifically)