MODULE OVERVIEW CHART

Module number and name	Lesson number and name	National curriculum links	Working scientifically links	Scientific enquiry type	Lesson summary
Year 5 Module Our Changing World	1: What signs of plant reproduction can we observe around our school?	Describe the life process of reproduction in some plants and animals	Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs and bar and line graphs	Observing changes over different periods of time	During these lessons children identify a variety of plants to observe, visit them regularly throughout the year and look for evidence of plant reproduction, for example, flowers, seed heads, berries and fruits on plants.
	2: How can we grow more plants, without using seeds?	Describe the life process of reproduction in some plants and animals	Identifying scientific evidence that has been used to support or refute ideas or arguments	Observing changes over different periods of time	During these lessons children explore practically some of the methods for growing new plants.
	3: Which plants are best to plant in our growing space? How can we ensure that produce is ready at the right time?	Describe the life process of reproduction in some plants and animals	Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary	Observing changes over different periods of time	During these lessons children apply their knowledge and understanding of plant life cycles as they plan for and grow plants across the year, ready for summer term ‘produce sales’ or similar events.
	4: How can we ensure that plants in our growing space yield as many crops as possible?	Describe the life process of reproduction in some plants and animals	Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary	Carrying out comparative and fair tests	During these lessons children set up and carry out an investigation to test a variable that may affect crop production.
Year 5 Module 1 Circle of Life	1: What is a life cycle?	Explain the differences in the life cycles of a mammal, an amphibian, an insect and a bird	Reporting and presenting 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	Using a wide range of secondary sources of information	In this lesson children are introduced to the life cycles of four significant types of animals: mammals, amphibians, insects and birds. They compare and contrast different animal life cycles, identifying common features and differences.
	2: What do we know about the life cycles of mammals?	Explain the differences in the life cycles of a mammal, an amphibian, an insect and a bird	Reporting and presenting 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	Using a wide range of secondary sources of information	In this lesson children deepen their knowledge about the group of animals called mammals. They find out about the life cycles of a variety of mammals, identifying some common characteristics.
	3: What do we know about the life cycles of amphibians?	Explain the differences in the life cycles of a mammal, an amphibian, an insect and a bird	Reporting and presenting 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	Using a wide range of secondary sources of information	In this lesson children deepen their knowledge about the group of animals called amphibians. They find out about the life cycles of a variety of amphibians, identifying some common characteristics including the process of metamorphosis.

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	4: What do we know about the life cycles of insects?	Explain the differences in the life cycles of a mammal, an amphibian, an insect and a bird	Reporting and presenting 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	Using a wide range of secondary sources of information	In this lesson children deepen their knowledge about the group of animals called insects. They find out about the life cycles of a variety of insects, identifying some common characteristics.
	5: What do we know about the life cycles of birds?	Explain the differences in the life cycles of a mammal, an amphibian, an insect and a bird	Reporting and presenting 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	Using a wide range of secondary sources of information	In this lesson children deepen their knowledge about the group of animals called birds. They find out about the life cycles of a variety of birds, identifying some common characteristics.
	6: What makes a successful life cycle?	Explain the differences in the life cycles of a mammal, an amphibian, an insect and a bird	Identifying scientific evidence that has been used to support or refute ideas or arguments	Finding things out using secondary sources of information	In this lesson children apply their knowledge and understanding of animal life cycles to an unfamiliar context. They invent their own animal, describe in detail each stage of its life cycle and explain how this will ensure its long-term success.
	7: How are humans helping endangered animals to complete their life cycles?	Explain the differences in the life cycles of a mammal, an amphibian, an insect and a bird	Identifying scientific evidence that has been used to support or refute ideas or arguments	Finding things out using secondary sources of information	In this lesson children find out about the ways in which humans are using science to help endangered animals complete their life cycles.
	EL1: Why do animals make incredible journeys as part of their life cycles?	Explain the differences in the life cycles of a mammal, an amphibian, an insect and a bird	Identifying scientific evidence that has been used to support or refute ideas or arguments	Finding things out using a wide range of secondary sources of information	In this lesson children find out about the incredible journeys that are undertaken by different types of animals during their life cycles.
Year 5 Module 2 Reproduction in Plants and Animals	1: How do flowering plants reproduce?	Describe the life process of reproduction in some plants and animals	Reporting and presenting 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	Grouping and classifying	In this lesson children revise work about the part that flowers play in the life cycle of flowering plants. They learn about the role of the flower, its parts and their function, and the processes of pollination and fertilisation.
	2: Are all flowers on all plants the same?	Describe the life process of reproduction in some plants	Identifying scientific evidence that has been used to support or refute ideas or arguments	Grouping and classifying	In this lesson children further develop their understanding of the role of flowers in the reproductive cycle of plants.
	3: Do all plants reproduce by producing seeds?	Describe the life process of reproduction in some plants and animals	Reporting and presenting 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	Finding things out using a wide range of secondary sources of information	In this lesson children learn about asexual reproduction, that is, the ways that plants can produce new plants from different parts of the parent plant, rather than by producing seeds.

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	4: How do amphibians and insects reproduce?	Describe the life process of reproduction in some plants and animals	Reporting and presenting 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	Finding things out using a wide range of secondary sources of information	In this lesson children find out in more detail about how amphibians and insects reproduce. They compare the process of reproduction in amphibians and insects, identifying and describing similarities and differences between the two and recognising both as examples of sexual reproduction, with some exceptions.
	5: How do mammals and birds reproduce?	Describe the life process of reproduction in some plants and animals	Reporting and presenting 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	Grouping and classifying	In this lesson children find out more about how mammals and birds reproduce. The compare the process of reproduction in mammals and birds, identifying and describing similarities and differences between the two and naming both as examples of sexual reproduction.
	6: How does the human life cycle compare with that of other mammals?	Describe the changes as humans develop to old age	Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs and bar and line graphs	Noticing patterns	In this lesson children identify the stages of the human life cycle, including puberty and pregnancy, and compare lengths of gestation for different mammals.
	7: How do girls become women?	Describe the changes as humans develop to old age	Reporting and presenting 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	Grouping and classifying	In this lesson children learn about the life cycle stage of puberty in girls.
	8: How do boys become men?	Describe the changes as humans develop to old age	Reporting and presenting 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	Grouping and classifying	In this lesson children learn about the life cycle stage of puberty in boys.
Year 5 Module 3 Get Sorted	1: How can we compare and group materials?	Compare and group together everyday materials based on evidence from comparative and fair tests, including hardness, solubility, transparency, conductivity (electrical and thermal) and response to magnets	Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, and bar and line graphs	Grouping and classifying	In this lesson children identify, compare and group materials based on their properties and according to their own or given criteria.
	2: Is a solid always hard?	Compare and group together everyday materials based on evidence from comparative and fair tests, including hardness, solubility, transparency, conductivity (electrical and thermal) and response to magnets	Reporting and presenting 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	Carrying out comparative and fair tests	In this lesson children investigate solids and compare them according to their properties.

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	3: Is a liquid always runny?	Compare and group together everyday materials based on evidence from comparative and fair tests, including hardness, solubility, transparency, conductivity (electrical and thermal) and response to magnets	Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary	Grouping and classifying	In this lesson children carry out various comparative tests, exploring the viscosity of liquids.
	4: Are all metals the same?	Compare and group together everyday materials based on evidence from comparative and fair tests, including hardness, solubility, transparency, conductivity (electrical and thermal) and response to magnets	Identifying scientific evidence that has been used to support or refute ideas	Grouping and classifying	In this lesson children explore the ways in which metals are used around their school and in the wider world, and link these uses to the properties of the metals.
	5: Are all plastics the same?	Compare and group together everyday materials based on evidence from comparative and fair tests, including hardness, solubility, transparency, conductivity (electrical and thermal) and response to magnets	Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary	Grouping and classifying	In this lesson children identify and investigate the wide-ranging properties of plastics.
	6: To bounce or not to bounce: Why are sports balls so different?	Compare and group together everyday materials based on evidence from comparative and fair tests, including hardness, solubility, transparency, conductivity (electrical and thermal) and response to magnets	Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary	Carrying out comparative and fair tests	In this lesson children investigate the variables that affect how a ball bounces.
Year 5 Module 4 Everyday Materials	1: Which materials are used in our school buildings, what for and why?	Give reasons, based on evidence from comparative and fair tests, for specific uses of everyday materials, including metals, wood and plastic	Reporting and presenting 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	Grouping and classifying	In this lesson children identify a variety of materials in different forms, observing how they are used for specific purposes within school buildings.
	2: Weighty problem: Which is the best carrier bag?	Give reasons, based on evidence from comparative and fair tests, for specific uses of everyday materials, including metals, wood and plastic	Planning different types of science enquiries to answer questions, including recognising and controlling variables where necessary	Carrying out comparative and fair tests	In this lesson children plan and carry out a fair test investigation into different types of plastic carrier bags, building on a lesson where they sorted, grouped and tested a wide range of plastics according to their properties.
	3: Which is the best type of plate to use?	Give reasons, based on evidence from comparative and fair tests, for specific uses of everyday materials, including metals, wood and plastic	Planning different types of science enquiries to answer questions, including recognising and controlling variables where necessary	Carrying out comparative and fair tests	In this lesson children carry out a comparative test to investigate how the properties of materials that are used to make plates affect their suitability for use in different situations or contexts.

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	4: Cool box conundrum: Can the same container keep cold things cold and hot things hot?	Give reasons, based on evidence from comparative and fair tests, for specific uses of everyday materials, including metals, wood and plastic	Taking measurements, using a wide range of scientific equipment, with increasing accuracy and precision, and taking repeat readings when appropriate	Carrying out comparative and fair tests	In this lesson children investigate how a cool bag affects the temperature of hot and cold food.
	5: Mystery material: What will happen if we add water to the material?	Give reasons, based on evidence from comparative and fair tests, for specific uses of everyday materials, including metals, wood and plastic	Taking measurements, using a wide range of scientific equipment, with increasing accuracy and precision, and taking repeat readings when appropriate	Observing changes over different periods of time	In this lesson children observe and measure the effects of adding increasing volumes of water to quantities of a mystery material.
	6: Nappy ending: What's the best brand of nappy?	Give reasons, based on evidence from comparative and fair tests, for specific uses of everyday materials, including metals, wood and plastic	Identifying evidence that has been used to support of refute ideas or arguments	Carrying out comparative and fair tests	In this lesson children investigate different brands of nappies, coming up with their own questions and methods of enquiry. They identify the evidence that they need to collect so that they can provide information to parents about the various brands of nappy on offer and the brand claims.
	EL1: Are all bikes the same?	Give reasons, based on evidence from comparative and fair tests, for specific uses of everyday materials, including metals, wood and plastic	Reporting and presenting 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	Grouping and classifying	In this lesson children identify the variety of materials (and their properties) that are used in making bicycles of different kinds.
	EL2: Spencer Silver and sticky notes: What's the stickiest glue?	Give reasons, based on evidence from comparative and fair tests, for specific uses of everyday materials, including metals, wood and plastic	Using test results to make predictions to set up further comparative and fair tests	Carrying out comparative and fair tests	In this lesson children learn about the chemist Spencer Silver and how he created Post-it™ notes almost by accident, as he worked to create a super-sticky glue.
Year 5 Module 5 Marvellous Mixtures	1: How can we separate mixtures?	Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating	Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary	Grouping and classifying	In this lesson children are introduced to the idea that materials can mix in different ways and that they can be separated. They make their own sieves to separate a complex mixture of dry solids.
	2: What happens when we mix liquids and solids?	Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution	Using test results to make predictions to set up further comparative and fair tests	Grouping and classifying	In this lesson children investigate dissolving solids.
	3: What makes a difference to how fast sugar or salt dissolves?	Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution	Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary	Planning comparative and fair tests	In this lesson children investigate what makes a difference to how rapidly a solid dissolves.
	4: How can we get drinkable water from seawater?	Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating	Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary	Observation over time	In this lesson children use their knowledge of evaporation and condensation to work out how to get materials back from a solution by investigating a real world problem: how to produce drinkable water from seawater, using limited equipment.

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	5: How can we purify materials?	Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating	Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary	n/a	In this lesson children draw on the work they have done in Lessons 1–4 in order to consolidate their understanding of separating mixtures. They are challenged to develop their own methods to separate pure salt from a rock salt mixture.
	EL1: What will happen if we add a sprinkle of salt to a combination of liquids?	Understand that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution	Reporting and presenting 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	Observation over time	In this lesson children explore what happens when oil and lemonade mix and the effect of a sprinkle of salt on the combination.
	EL2: How can we clean up contaminated water?	Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating	Reporting and presenting 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	n/a	In this lesson children use their knowledge of separating mixtures to help them solve a real world problem.
Year 5 Module 6 Materials: All Change	1: Are the changes that happen around us reversible or non-reversible?	Demonstrate that dissolving, mixing and changes of state are reversible changes. 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	Reporting and presenting 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	Grouping and classifying	In this lesson children begin to explore how materials change when they are brought together in different ways. They identify types of changes and group them according to whether they think the change could be reversed, and then according to the conditions needed to bring about the change.
	2: How much gas can be produced by non-reversible change?	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	Using test results to make predictions to set up further comparative and fair tests	Carrying out comparative and fair tests	In this lesson, as an example of a non-reversible change, children explore a variety of solids and liquids that react chemically when they are mixed.
	3: How long does it take for iron nails to rust?	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	Planning different types of scientific enquiry to answer questions, including recognising and controlling variables where necessary	Observing over time	In this lesson children set up an investigation to observe the changes that take place when some metals are exposed to the air or water.
	4: What happens when a candle burns?	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	Reporting and presenting 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	Observing over time	In this lesson children observe and discuss the changes involved in burning a candle, recognising that there are reversible and non-reversible changes involved in the process.

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	5: How long does it take for things to rust?	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	Reporting and presenting 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	Observing changes over different periods of time	In this lesson children collate the results of the observation enquiries begun a couple of weeks before in Lesson 3, draw conclusions and present them to their peers.
	EL1: What would make the best rocket fuel?	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	Planning different types of scientific enquiry to answer questions, including recognising and controlling variables where necessary	Comparative and fair tests	In this lesson children use knowledge gained from Lesson 2 to investigate a non-reversible change that takes place when an effervescent vitamin C tablet and water are combined.
	EL2: What are the bubbles in honeycomb toffee?	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	Reporting and presenting 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	Observation over time	In this lesson children observe the process of making honeycomb toffee and identify the changes that happen to the materials used in the recipe.
Year 5 Module 7: Feel the Force	1: How can we measure forces?	Identify the effects of air resistance, water resistance and friction, which act between moving surfaces	Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, including taking repeat readings when appropriate	Noticing patterns	In this lesson children extend their understanding of friction by learning how to measure forces using a Newton meter.
	2: Why does an object fall?	Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object, and identify the effects of air resistance, water resistance and friction, which act between moving surfaces	Identifying scientific evidence that has been used to support or refute ideas or arguments	Carrying out comparative and fair tests	In this lesson children identify how scientific evidence is used to support and refute ideas, testing the explanations of Aristotle and Galileo about how things fall. Children investigate and find evidence for these ideas, exploring gravity as a non-contact force.
	3: What makes things move?	Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object	Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary	Carrying out simple comparative and fair tests	In this lesson children investigate how forces make things change direction, speed up, slow down, start or stop moving and use force arrows to represent these.
	4: How can we slow down falling objects?	Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object, and identify the effects of air resistance, water resistance and friction, which act between moving surfaces	Using test results to make predictions to set up further comparative and fair tests	Carrying out simple comparative and fair tests	In this lesson children plan and carry out a fair test investigation into air resistance, using parachutes. They make parachutes and measure the time taken for the parachute to fall. They will then use the results of their initial investigations to predict how they could improve their parachutes and plan and test out their ideas.
	5: Does the shape of an object affect its movement in a liquid?	Identify the effects of air resistance, water resistance and friction, which act between moving surfaces	Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate	Carrying out comparative and fair tests	In this lesson the children learn that water resistance is a form of friction that opposes movement in water. They explore how the shape of an object affects its movement through a liquid.

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	6: Do all heavy things sink?	Identify scientific evidence that has been used to support or refute ideas in arguments	Reporting and presenting 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	Carrying out comparative and fair tests	In this lesson children measure the effect of upthrust on objects in water, by measuring and comparing weights of objects in water and air. They find out how the relationship between weight and size affects floating.
	7: How far can you stretch?	Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object	Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, and bar and line graphs	Noticing patterns	In this lesson children investigate what happens to rubber bands and springs when a force is applied.
	8: How can we use levers to help us?	Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect	Taking measurements, using a range of scientific equipment with increasing accuracy and precision, including taking repeat readings when appropriate	Carrying out comparative simple and fair tests	This lesson introduces mechanisms – devices that change the effect of a force. Children investigate levers for moving things and increasing/decreasing a force.
	9: How can we lift a heavy load?	Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect	Reporting and presenting 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	Noticing patterns	In this lesson children use pulleys to lift objects.
	10: Can a wheel with teeth make work easier?	Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect	Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, and bar and line graphs	Noticing patterns	In this lesson children learn about gears, a third type of mechanism that helps us to do things by changing the effect of forces. Children identify where gears are used in everyday life.
Year 5 Module 8: The Earth and Beyond	1: What's in space?	Describe the movement of the Earth and other planets in the solar system relative to the Sun	Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs	Finding things out using a wide range of secondary sources of information	In this lesson children make observations of the night sky. Using secondary sources of information they consider explanations for, and raise questions about, their observations. They find answers to some of their questions through a 'journey into space', during which they explore diagrams and photographs of the solar system and beyond.
	2: What is a year?	Describe the movement of the Earth and other planets in the solar system relative to the Sun	Reporting and presenting 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	Finding things out using a wide range of secondary sources of information	In this lesson children will draw a large 'plan' of the solar system and an annotated scientific diagram of Earth's orbit which they use to explain the year, number of days in a year, leap years and how astronomers in the past used the stars as markers for the start and finish of an orbit.
	3: What is a day?	Use the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky	Reporting and presenting 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	Noticing patterns	In this lesson children investigate how the Earth's rotation causes the apparent movement of the Sun across the sky.
	4: How does the Sun help us to measure time?	Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky	Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate	Observing changes over different periods of time	In this lesson children test different types of shadow clock. Children record the position and length of a shadow.

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	5: What time is it around the world?	Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky	Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs	Finding things out using a wide range of secondary sources of information	In this lesson children use a globe and world maps to find out about world time zones and how time is linked to longitude.
	6: Why do we have seasons?	Describe the movement of the Earth, and other planets, relative to the Sun in the solar system	Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, and bar and line graphs	Observing change over time (modelled)	In this lesson children explore how Earth's tilt on its axis causes seasonal changes and changes in daylight hours.
	7: What are our conclusions about sunrise and sunset times?	Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky	Identifying scientific evidence that has been used to support or refute ideas or arguments	Finding things out using a wide range of secondary sources of information	This lesson develops children's learning on time and seasons through investigating and explaining changes in the times of sunrise and sunset in different parts of the UK and different parts of the world.
	8: Why does the Moon change shape?	Describe the movement of the Moon relative to the Earth	Using test results to make predictions to set up further comparative and fair tests	Observing changes over different periods of time	In this lesson the children use their Moon diaries as a source of information to investigate how the Moon appears to change shape over a month.