

Skills Progression

Please remember to refer to the **five** areas of Working Scientifically:

- Asking Questions and Carrying Out Fair and Comparative Tests (**Comparative & fair tests**)
- Observing and Measuring Changes (**Observing over time**)
- Identifying, Classifying, Recording and Presenting Data (**Identifying and classifying**)
- Drawing Conclusions, Noticing Patterns and Presenting Findings (**Pattern seeking**)
- Using Scientific Evidence and Secondary Sources of Information (**Research**)

Working Scientifically

Key Stage 1 National Curriculum

During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- asking simple questions and recognising that they can be answered in different ways;
- observing closely, using simple equipment;
- performing simple tests;
- identifying and classifying;
- using their observations and ideas to suggest answers to questions;
- gathering and recording data to help in answering questions.

Lower Key Stage 2 National Curriculum

During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- 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;

Upper Key Stage 2 National Curriculum

During years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary;
- 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;
- using test results to make predictions to set up further comparative and fair tests;
- 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;

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| <ul style="list-style-type: none"> identifying differences, similarities or changes related to simple scientific ideas and processes; using straightforward scientific evidence to answer questions or to support their findings. | <ul style="list-style-type: none"> identifying scientific evidence that has been used to support or refute ideas or arguments. |
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Asking Questions and Carrying Out Fair and Comparative Tests (Asking questions/Comparative & fair tests)

KS1 Science National Curriculum	Lower KS2 Science National Curriculum	Upper KS2 Science National Curriculum
Asking simple questions and recognising that they can be answered in different ways. Performing simple tests. Children can: - explore the world around them, leading them to ask some simple scientific questions about how and why things happen; - begin to recognise ways in which they might answer scientific questions; - ask people questions and use simple secondary sources to find answers; - carry out simple practical tests, using simple equipment; - experience different types of scientific enquiries, including practical activities; - talk about the aim of scientific tests they are working on; - with support, start to recognise a fair test.	Asking relevant questions and using different types of scientific enquiries to answer them. Setting up simple practical enquiries, comparative and fair tests. Children can: - start to raise their own relevant questions about the world around them in response to a range of scientific experiences; - start to make their own decisions about the most appropriate type of scientific enquiry they might use to answer questions; - recognise when a fair test is necessary; - help decide how to set up a fair test, making decisions about what observations to make, how long to make them for and the type of simple equipment that might be used; - set up and carry out simple comparative and fair tests.	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. Children can: - with growing independence, raise their own relevant questions about the world around them in response to a range of scientific experiences; - with increasing independence, make their own decisions about the most appropriate type of scientific enquiry they might use to answer questions; - explore and talk about their ideas, raising different kinds of scientific questions; - ask their own questions about scientific phenomena; - select and plan the most appropriate type of scientific enquiry to use to answer scientific questions; - make their own decisions about what observations to make, what measurements to use and how long to make them for, and whether to repeat them; - plan, set up and carry out comparative and fair tests to

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- answer questions, including recognising and controlling variables where necessary;
- h. use their test results to identify when further tests and observations may be needed;
 - i. use test results to make predictions for further tests.

Observing and Measuring Changes (Observing)

KS1 Science National Curriculum	Lower KS2 Science National Curriculum	Upper KS2 Science National Curriculum
Observing closely, using simple equipment. Children can: a. observe the natural and humanly constructed world around them; b. observe changes over time; c. use simple measurements and equipment; d. make careful observations, sometimes using equipment to help them observe carefully.	Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. Children can: a. make systematic and careful observations; b. observe changes over time; c. use a range of equipment, including thermometers and data loggers; d. ask their own questions about what they observe; e. where appropriate, take accurate measurements using standard units using a range of equipment.	Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. Children can: a. choose the most appropriate equipment to make measurements and explain how to use it accurately; b. take measurements using a range of scientific equipment with increasing accuracy and precision; c. take repeat readings when appropriate; d. understand why we take an average in repeat readings.

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Identifying, Classifying, Recording and Presenting Data (Identifying and classifying)

KS1 Science National Curriculum	Lower KS2 Science National Curriculum	Upper KS2 Science National Curriculum
Identifying and classifying. Gathering and recording data to help in answering questions. Children can: - use simple features to compare objects, materials and living things; - decide how to sort and classify objects into simple groups with some help; - record and communicate findings in a range of ways with support; - sort, group, gather and record data in a variety of ways to help in answering questions such as in simple sorting diagrams, pictograms, tally charts, block diagrams and simple tables.	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. Children can: - talk about criteria for grouping, sorting and classifying; - group and classify things; - collect data from their own observations and measurements; - present data in a variety of ways to help in answering questions; - use, read and spell scientific vocabulary correctly and with confidence, using their growing word reading and spelling knowledge; - record findings using scientific language, drawings, labelled diagrams, keys, bar charts and tables.	Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. Children can: - independently group, classify and describe living things and materials; - use and develop keys and other information records to identify, classify and describe living things and materials; - decide how to record data from a choice of familiar approaches; - record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar graphs and line graphs.

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Drawing Conclusions, Noticing Patterns and Presenting Findings [\(Pattern seeking\)](#)

KS1 Science National Curriculum	Lower KS2 Science National Curriculum	Upper KS2 Science National Curriculum
Using their observations and ideas to suggest answers to questions. Children can: - notice links between cause and effect with support; - begin to notice patterns and relationships with support; - begin to draw simple conclusions; - identify and discuss differences between their results; - use simple and scientific language; - read and spell scientific vocabulary at a level consistent with their increasing word reading and spelling knowledge at key stage 1; - talk about their findings to a variety of audiences in a variety of ways.	Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. Children can: - draw simple conclusions from their results; - make predictions; - suggest improvements to investigations; - raise further questions which could be investigated; - first talk about, and then go on to write about, what they have found out; - report and present their results and conclusions to others in written and oral forms with increasing confidence.	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. Children can: - notice patterns; - draw conclusions based in their data and observations; - use their scientific knowledge and understanding to explain their findings; - read, spell and pronounce scientific vocabulary correctly; - identify patterns that might be found in the natural environment; - look for different causal relationships in their data; - discuss the degree of trust they can have in a set of results; - independently report and present their conclusions to others in oral and written forms.

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Using Scientific Evidence and Secondary Sources of Information (Research)

Lower KS2 Science National Curriculum

Identifying differences, similarities or changes related to simple scientific ideas and processes.

Using straightforward scientific evidence to answer questions or to support their findings.

Children can:

- make links between their own science results and other scientific evidence;
- use straightforward scientific evidence to answer questions or support their findings;
- identify similarities, differences, patterns and changes relating to simple scientific ideas and processes;
- recognise when and how secondary sources might help them to answer questions that cannot be answered through practical investigations.

Upper KS2 Science National Curriculum

Identifying scientific evidence that has been used to support or refute ideas or arguments.

Children can:

- use primary and secondary sources evidence to justify ideas;
- identify evidence that refutes or supports their ideas;
- recognise where secondary sources will be most useful to research ideas and begin to separate opinion from fact;
- use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas;
- talk about how scientific ideas have developed over time.

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	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Seasonal Change	1. observe changes across the 4 seasons 2. observe and describe weather associated with the seasons and how day length varies 3. pupils should observe and talk about changes in the weather and seasons* Note – pupils should be warned that it is not safe to look directly at the sun, even when wearing dark glasses Pupils might work scientifically by: making tables and charts about the weather, and making displays of what happens in the world around them, including day length, as the seasons change					
Animals Including Humans	1. Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. 2. Identify and name a variety of common animals that are	1. Notice that animals, including humans, have offspring which grow into adults. 2. Find out about and describe the basic needs of animals,	1. Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition	1. Describe the simple functions of the basic parts of the digestive system in humans. 2. Identify the different types of teeth in humans and	1. Describe the changes as humans develop to old age. Pupils should draw a timeline to indicate stages in the growth and development of	1. Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. 2. Recognise the

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	carnivores, herbivores and omnivores. 3. Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets). 4. Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. Pupils might work scientifically by: using their observations to compare and contrast animals at first hand or through videos and photographs, describing how they identify and group them; grouping animals according to what they eat; and using their senses to compare different textures, sounds and smells.	including humans, for survival (water, food and air). 3. Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. Pupils might work scientifically by: observing, through video or first-hand observation and measurement, how different animals, including humans, grow; asking questions about what things animals need for survival and what humans need to stay healthy; and suggesting ways to find answers to their questions.	from what they eat. 2. Identify that humans and some other animals have skeletons and muscles for support, protection and movement. Pupils might work scientifically by: identifying and grouping animals with and without skeletons and observing and comparing their movement; exploring ideas about what would happen if humans did not have skeletons. They might compare and contrast the diets of different animals (including their pets) and decide ways of grouping them according to what they eat. They might research different food groups and how they keep us healthy, and design meals based on what they find out.	their simple functions. 3. Construct and interpret a variety of food chains, identifying producers, predators and prey. Pupils might work scientifically by: comparing the teeth of carnivores and herbivores and suggesting reasons for differences; finding out what damages teeth and how to look after them. They might draw and discuss their ideas about the digestive system and compare them with models or images.	humans. They should learn about the changes experienced in puberty. Pupils could work scientifically by: researching the gestation periods of other animals and comparing them with humans; by finding out and recording the length and mass of a baby as it grows.	impact of diet, exercise, drugs and lifestyle on the way their bodies function. 3. Describe the ways in which nutrients and water are transported within animals, including humans. Pupils might work scientifically by: exploring the work of scientists and scientific research about the relationship between diet, exercise, drugs, lifestyle and health
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Plants	1. Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. 2. Identify and describe the basic structure of a variety of common flowering plants, including trees. Pupils might work scientifically by: observing closely, perhaps using magnifying glasses, and comparing and contrasting familiar plants; describing how they were able to identify and group them, and drawing diagrams showing the parts of different plants including trees. Pupils might keep records of how plants have changed over time, for example, the leaves falling off trees and buds opening; and compare and contrast	1. Observe and describe how seeds and bulbs grow into mature plants. 2. Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. Pupils might work scientifically by: observing and recording, with some accuracy, the growth of a variety of plants as they change over time from a seed or bulb, or observing similar plants at different stages of growth; setting up a comparative test to show that plants need light and water to stay healthy.	1. Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. 2. 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. 3. Investigate the way in which water is transported within plants. 4. Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. Pupils might work scientifically by: comparing the effect of different factors on plant growth, for example, the amount	Covered under Living things and their habitats: They should identify how the habitat changes throughout the year. Pupils should explore possible ways of grouping a wide selection of living things that include animals, flowering plants and non-flowering plants.	Covered under Living things and their habitats: Describe the life process of reproduction in some plants and animals.	Covered under Living things and their habitats: Give reasons for classifying plants and animals based on specific characteristics.
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	what they have found out about different plants.		of light, the amount of fertiliser; discovering how seeds are formed by observing the different stages of plant life cycles over a period of time; looking for patterns in the structure of fruits that relate to how the seeds are dispersed. They might observe how water is transported in plants, for example, by putting cut, white carnations into coloured water and observing how water travels up the stem to the flowers.			
Living Things and their Habitats		1. Explore and compare the differences between things that are living, dead, and things that have never been alive. 2. Identify that most living things live in habitats to which they are suited and describe how different habitats		1. Recognise that living things can be grouped in a variety of ways. 2. Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. 3. Recognise that environments can	1. Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. 2. Describe the life process of reproduction in some plants and animals. Pupils should find out about different types of reproduction, including sexual and	1. 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. 2. Give reasons for classifying plants and

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		provide for the basic needs of different kinds of animals and plants, and how they depend on each other. 3. Identify and name a variety of plants and animals in their habitats, including microhabitats. 4. 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. Pupils might work scientifically by: sorting and classifying things according to whether they are living, dead or were never alive, and recording their findings using charts. They should describe how they decided where to place things, exploring questions like: 'Is a flame alive?		change and that this can sometimes pose dangers to living things. Pupils might work scientifically by: using and making simple guides or keys to explore and identify local plants and animals; making a guide to local living things; raising and answering questions based on their observations of animals and what they have found out about other animals that they have researched.	asexual reproduction in plants, and sexual reproduction in animals. Pupils might work scientifically by: observing and comparing the life cycles of plants and animals in their local environment with other plants and animals around the world (in the rainforest, in the oceans, in desert areas and in prehistoric times), asking pertinent questions and suggesting reasons for similarities and differences. They might try to grow new plants from different parts of the parent plant, for example, seeds, stem and root cuttings, tubers, bulbs. They might observe changes in an animal over a period of time (for example, by	animals based on specific characteristics. Pupils should build on their learning about grouping living things in year 4, by looking at the classification system in more detail. Pupils might work scientifically by: using classification systems and keys to identify some animals and plants in the immediate environment. They could research unfamiliar animals and plants from a broad range of other habitats and decide where they belong in the classification system.
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		Is a deciduous tree dead in winter?' and talk about ways of answering their questions. They could construct a simple food chain that includes humans (eg, grass, cow, human). They could describe the conditions in different habitats and microhabitats (under log, on stony path, under bushes); and find out how the conditions affect the number and type(s) of plants and animals that live there.			hatching and rearing chicks), comparing how different animals reproduce and grow.	
Materials/States of Matter	<u>Uses of everyday materials</u> 1. Distinguish between an object and the material from which it is made. 2. Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. 3. Describe the simple physical	<u>Uses of everyday materials</u> 1. Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. 2. Find out how the shapes of solid objects made from		<u>States of matter</u> 1. Compare and group materials together, according to whether they are solids, liquids or gases. 2. Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in	<u>Uses of everyday materials</u> 1. 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.	

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	properties of a variety of everyday materials. 4. Compare and group together a variety of everyday materials on the basis of their simple physical properties. Pupils might work scientifically by: performing simple tests to explore questions, for example: 'What is the best material for an umbrella? ... for lining a dog basket? ... for curtains? ... for a bookshelf? ... for a gymnast's leotard?'	some materials can be changed by squashing, bending, twisting and stretching. Pupils might work scientifically by: comparing the uses of everyday materials in and around the school with materials found in other places (at home, the journey to school, on visits, and in stories, rhymes and songs); observing closely, identifying and classifying the uses of different materials, and recording their observations.		degrees Celsius (°C). 3. Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. Pupils might work scientifically by: grouping and classifying a variety of different materials; exploring the effect of temperature on substances such as chocolate, butter, cream (for example, to make food such as chocolate crispy cakes and ice-cream for a party). They could research the temperature at which materials change state, for example, when iron melts or when oxygen condenses into a liquid. They might observe and record evaporation over a period of time, for	2. Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution. 3. Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating. 4. Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic. 5. Demonstrate that dissolving, mixing and changes of state are reversible changes. 6. 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	
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				example, a puddle in the playground or washing on a line, and investigate the effect of temperature on washing drying or snowmen melting.	burning and the action of acid on bicarbonate of soda. *Pupils should build a more systematic understanding of materials by exploring and comparing the properties of a broad range of materials, including relating these to what they learnt about magnetism in year 3 and about electricity in year 4. Pupils might work scientifically by: carrying out tests to answer questions, for example, 'Which materials would be the most effective for making a warm jacket, for wrapping ice cream to stop it melting, or for making blackout curtains?' They might compare materials in order to make a switch in a circuit.	
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					They could observe and compare the changes that take place, for example, when burning different materials or baking bread or cakes. They might research and discuss how chemical changes have an impact on our lives, for example, cooking, and discuss the creative use of new materials such as polymers, super-sticky and super-thin materials.	
Light			1. Recognise that they need light in order to see things and that dark is the absence of light. 2. Notice that light is reflected from surfaces. 3. Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. 4. Recognise that shadows are formed when the light from a			1. Recognise that light appears to travel in straight lines. 2. 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. 3. Explain that we see things because light travels from light sources to our eyes or from light sources to

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light source is blocked by an opaque object.
5. Find patterns in the way that the size of shadows change.

Pupils might work scientifically by:
looking for patterns in what happens to shadows when the light source moves or the distance between the light source and the object changes.

objects and then to our eyes.
4. Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.

Pupils might work scientifically by:
deciding where to place rear-view mirrors on cars; designing and making a periscope and using the idea that light appears to travel in straight lines to explain how it works. They might investigate the relationship between light sources, objects and shadows by using shadow puppets. They could extend their experience of light by looking a range of phenomena including rainbows, colours on soap bubbles, objects looking bent in water, and coloured filters (they do not need to explain why these phenomena occur).

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Forces and Magnets			1. Compare how things move on different surfaces. 2. Notice that some forces need contact between 2 objects, but magnetic forces can act at a distance. 3. Observe how magnets attract or repel each other and attract some materials and not others. 4. 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. 5. Describe magnets as having 2 poles. 6. Predict whether 2 magnets will attract or repel each other, depending on which poles are facing. Pupils might work scientifically by: comparing how different things move		1. Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. 2. Identify the effects of air resistance, water resistance and friction, that act between moving surfaces. 3. Recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect. *D&T link - Pupils should explore the effects of levers, pulleys and simple machines on movement. Pupils might work scientifically by: exploring falling paper cones or cupcake cases, and designing and making	
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and grouping them; raising questions and carrying out tests to find out how far things move on different surfaces, and gathering and recording data to find answers to their questions; exploring the strengths of different magnets and finding a fair way to compare them; sorting materials into those that are magnetic and those that are not; looking for patterns in the way that magnets behave in relation to each other and what might affect this, for example, the strength of the magnet or which pole faces another; identifying how these properties make magnets useful in everyday items and suggesting creative uses for different magnets.

a variety of parachutes and carrying out fair tests to determine which designs are the most effective. They might explore resistance in water by making and testing boats of different shapes. They might design and make products that use levers, pulleys, gears and/or springs and explore their effects.

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Sound				1. Identify how sounds are made, associating some of them with something vibrating. 2. Recognise that vibrations from sounds travel through a medium to the ear. 3. Find patterns between the pitch of a sound and features of the object that produced it. 4. Find patterns between the volume of a sound and the strength of the vibrations that produced it. 5. Recognise that sounds get fainter as the distance from the sound source increases. Pupils might work scientifically by: finding patterns in the sounds that are made by different objects such as saucepan lids of different sizes or elastic bands of		
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				different thicknesses. They might make earmuffs from a variety of different materials to investigate which provides the best insulation against sound. They could make and play their own instruments by using what they have found out about pitch and volume.		
Electricity				1. Identify common appliances that run on electricity. 2. Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. 3. 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. 4. Recognise that a switch opens and closes a circuit and		1. Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. 2. 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. 3. Use recognised symbols when representing a simple circuit in a diagram.

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				associate this with whether or not a lamp lights in a simple series circuit. 5. Recognise some common conductors and insulators, and associate metals with being good conductors. Pupils might work scientifically by: observing patterns, for example, that bulbs get brighter if more cells are added, that metals tend to be conductors of electricity, and that some materials can and some cannot be used to connect across a gap in a circuit.		Pupils might work scientifically by: systematically identifying the effect of changing one component at a time in a circuit; designing and making a set of traffic lights, a burglar alarm or some other useful circuit.
Earth and Space					1. Describe the movement of the Earth and other planets relative to the sun in the solar system. 2. Describe the movement of the moon relative to the Earth.	

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					3. Describe the sun, Earth and moon as approximately spherical bodies. 4. Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky. Pupils might work scientifically by: comparing the time of day at different places on the Earth through internet links and direct communication; creating simple models of the solar system; constructing simple shadow clocks and sundials, calibrated to show midday and the start and end of the school day; finding out why some people think that structures such as Stonehenge might have been used as astronomical clocks	
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Evolution and Inheritance						1. Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. 2. Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. 3. Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. Pupils might work scientifically by: observing and raising questions about local animals and how they are adapted to their environment; comparing how some living things are adapted to survive in extreme conditions,
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						for example, cactuses, penguins and camels. They might analyse the advantages and disadvantages of specific adaptations, such as being on 2 feet rather than 4, having a long or a short beak, having gills or lungs, tendrils on climbing plants, brightly coloured and scented flowers.
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