

Year 3 Overview: Science

Title	Core Skills	Challenge	Target Tracker Statements
<p>Plants</p> <p>On Going Working Scientifically Skills: Do ask relevant questions? Can they set up simple practical enquiries? Can they take appropriate measurements? Can they record data in a variety of different ways? Can they report on their findings using presentations/diagrams e.t.c? Can I use my results to draw simple conclusions and suggest more questions?</p>	<p>Can they identify the different parts of a flowering plant?</p> <p>Can they describe the functions of different parts of a plant?</p> <p>Can they explain what a plant needs to grow?</p> <p>Can they compare the growth of different plants?</p> <p>Can they explain how water is transported within a plant?</p> <p>Can they identify the role of flowers in the life cycle of a plant including pollination, seed formation and seed dispersal?</p>	<p>Can children consider how certain plants features have adapted to their environment?</p> <p>Can they set up their own practical investigation to investigate an aspect of plant growth?</p> <p>Can they compare the requirements of different plants and link these to particular habitats?</p> <p>Can they suggest why parts may vary in size and shape from one species of flowering plant to another?</p> <p>Can they suggest why pollination, seed formation and seed dispersal may vary from one type of plant to another?</p>	<p>. Identify and describe different parts of a flowering plant.</p> <p>. Explore the requirements of plants for life and growth</p> <p>. Investigate the way in which water is transported within plants</p> <p>. Explore the part that flowers play in the life cycle of flowering plants.</p> <p>Ongoing working scientifically See the ongoing working scientifically skills. Mark as meeting on target tracker when demonstrated three times.</p>
<p>Rocks</p> <p>On Going Working Scientifically Skills: Can they report on their findings in variety of ways (written description)? Can they identify differences and similarities between different scientific processes (rock erosion)? Can I set up simple practical enquiries?</p>	<p>Can they identify different uses for rocks in their local environment?</p> <p>Can they compare rocks based on their properties?</p> <p>Can they test rocks for certain properties (permeability e.t.c)?</p> <p>Can they describe how fossils are formed?</p> <p>Can they explain what soil is and how it is made?</p>	<p>Can children independently plan an investigation looking at properties of rocks?</p> <p>Can I write a detailed description of the process of the erosion of rocks using scientific vocabulary?</p> <p>Can they explain the importance of studying fossils?</p> <p>Can they suggest uses for different kinds of rocks based on their properties?</p> <p>Can they compare soil from different areas and decide which soil is from which area and give reasons as to how they know?</p>	<p>. Compare and group together different rocks on the basis of their characteristics.</p> <p>. Describe in simple forms how the</p> <p>. Recognise that soils are made from rocks and organic matter.</p> <p>Ongoing working scientifically See the ongoing working scientifically skills. Mark as meeting on target tracker when demonstrated three times.</p>

<p>Animals including humans</p> <p>On Going Working Scientifically Skills: Can they ask relevant questions? Can they use straightforward scientific evidence to answer question? Can they gather, record, classify and present data in a variety of ways? Can they make systematic and careful observations?</p>	<p>Can children sort food into the main food groups? Can children explain the role of vitamins, minerals e.t.c? Can children create a healthy/balanced diet? Can children sort animals according to their skeletons (no skeleton, exoskeleton e.t.c)? Can children identify the role of muscles in the body? Can children explain how muscles work?</p>	<p>Can children identify at how deficiencies in some vitamins may lead to health problems?</p> <p>Can children suggest how people may need different dietary requirements (athletes, children not exposed to the sun)?</p> <p>Can children link their understanding of diet to the skeleton/muscles?</p>	<p>. Identify that humans and some other animals have skeletons and muscles for support, protection and movement.</p> <p>. 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.</p> <p>Ongoing working scientifically</p> <p>See the ongoing working scientifically skills. Mark as meeting on target tracker when demonstrated three times.</p>
<p>Light</p> <p>On Going Working Scientifically Skills: Can they make systematic and careful observations? Can they set up simple practical enquiries? Can they make systematic observations using a range of equipment (dataloggers)? Can they record findings using simple scientific language, drawings, labelled diagrams (drawing diagrams to demonstrate reflection of light)? Can they use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions? Can they use straightforward scientific evidence to answer questions or to support his/her findings?</p>	<p>Can they understand the relationship between light and seeing objects (drawing diagrams)?</p> <p>Can they demonstrate their understanding of the behaviour of light?</p> <p>Can they investigate which surfaces reflect light?</p> <p>Can they explain how shadows are formed?</p> <p>Can pupils investigate factors that may make a shadow change?</p> <p>Can they identify how light from the sun might be dangerous and ways they can protect their eyes?</p>	<p>Can children identify what all reflective materials have in common?</p> <p>Can pupils investigate factors that may make a shadow change?</p> <p>Can they plan their own investigation looking at changes in shadows?</p>	<p>. Notice that light is reflected from surfaces.</p> <p>. Recognise that he/she needs light in order to see things and that dark is the absence of light.</p> <p>. Recognise that light from the sun can be dangerous and that there are ways to protect eyes.</p> <p>. Recognise that shadows are formed when the light from a light source is blocked by a solid object.</p> <p>. Find patterns in the way that the size of shadows change.</p> <p>Ongoing working scientifically</p> <p>See the ongoing working scientifically skills. Mark as meeting on target tracker when demonstrated three times.</p>

<h2 style="margin: 0;">Forces and magnets</h2> <p style="margin: 0;">On Going Working Scientifically Skills: Do ask relevant questions? Can they identify differences and similarities between different scientific processes? Can they use straightforward scientific evidence to answer questions or to support his/her findings? Can they record findings using simple scientific language, drawings, labelled diagrams? Can they set up simple practical enquiries?</p>	<p>Can children identify how forces can be made? Can children sort objects into what forces are acting on them?</p> <p>Can they identify materials that are magnetic?</p> <p>Can children set up tests to compare how objects move on different surfaces?</p> <p>Can children explore the behaviour of magnets in relation to their poles?</p> <p>Can they explain the process of repelling and attraction in relation to magnets?</p> <p>Can children group materials based on their magnetic properties?</p> <p>Can they predict which magnets will attract or repel using their understanding of magnetic poles?</p>	<p>Can they predict how an object will move on other surfaces and suggest why?</p> <p>Can children identify characteristics of materials that are magnetic?</p> <p>Can they explore how magnetic attraction and repulsion are affected by distance?</p> <p>Can they explore whether some magnets are stronger than others?</p> <p>Can they some applications of magnets and magnetic materials?</p> <p>Can they apply ideas about the interaction of magnets to contexts such as toys?</p>	<p>. Compare how things move on different surfaces.</p> <p>. Notice that some forces need contact between two objects but magnetic forces can act at a distance.</p> <p>. Compare and group together a variety of everyday materials on the basis of whether or not they are attracted to a magnet, and identify some magnetic materials.</p> <p>. Observe how magnets attract or repel each other and attract some materials and not others.</p> <p>. Describe magnets as having two poles.</p> <p>. Predict whether two magnets will attract or repel each other, depending on which poles are facing.</p> <p style="text-align: center;"><i>Ongoing working scientifically</i></p> <p>See the ongoing working scientifically skills. Mark as meeting on target tracker when demonstrated three times.</p>

Year 4 Overview: Science

Title	Core Skills	Challenge	Target Tracker Statements
<p>Living things and their habitat</p> <p>On Going Skills: Can they report on their investigations using displays or presentations (presentation on effect on environment)?</p>	<p>Can they use classification keys to group and identify members from a range of familiar and less familiar living things?</p> <p>Can they suggest different ways of sorting the same group of living things, e.g. grouping birds according to where they live, what they eat and size of adults?</p> <p>Can they explore the work of Carl Linneaus?</p> <p>Can they observe how a habitat changes throughout the year?</p> <p>Can they describe examples of living things that are threatened by changes to environments, e.g. owls and habitat loss? <i>(cross-curricular writing opportunity to persuade company to be better for the environment)</i></p> <p>Can children identify some of the positive effects of initiatives such as nature reserves, parks, garden ponds, national trust e.t.c?</p>	<p>Can they describe examples of living things adapting to environmental change, e.g. urban foxes, and examples of extinction due to environmental change?</p> <p>Can they devise own classification keys to group living things?</p> <p>Can they suggest why some ways of grouping living things may be more useful than others, e.g. why grouping by number of legs is an easy aid to identification?</p>	<p>Recognise that living things can be grouped in a variety of ways.</p> <p>Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.</p> <p>Recognise that environments can change and that this can sometimes pose dangers and have an impact on living things.</p> <p style="text-align: center;"><i>Ongoing working scientifically</i></p> <p>See the ongoing working scientifically skills. Mark as meeting on target tracker when demonstrated three times.</p>

<p>Animals, including humans</p> <p>On Going Skills: Can they use straightforward scientific evidence to answer questions or to support his/her findings?</p>	<p>Can they identify what each organ in the digestive system does?</p> <p>Can they describe the function of each type of tooth in the human skull?</p> <p>Can children use their knowledge of the types of teeth and relate it to herbivores/carnivores?</p> <p>Can children identify how to look after their teeth?</p> <p>Can they use a food chain to represent predator-prey relationships?</p>	<p>Can they explain why the simple functions of the basic parts of the digestive system in humans are necessary?</p> <p>Can they explain why humans have different types of teeth?</p> <p>Can they suggest what might happen in a food chain if the population of one of the organisms changes?</p>	<p>Describe the simple functions of the basic parts of the digestive system in humans.</p> <p>Identify the different types of teeth in humans and their simple functions.</p> <p>Construct and interpret a variety of food chains, identifying producers, predators and prey.</p> <p>Ongoing working scientifically</p> <p>See the ongoing working scientifically skills. Mark as meeting on target tracker when demonstrated three times.</p>
<p>Electricity</p> <p>On Going Skills: Do ask relevant questions? Can they set up simple practical enquiries? Can they record data in a variety of different ways? Can they report on their findings using presentations/diagrams e.t.c? Can they report on their investigations using displays or presentations? Can they use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions?</p>	<p>Can they list examples of appliances that run on electricity?</p> <p>Can they construct a simple circuit and name its components?</p> <p>Can they sort materials into conductors and insulators, identifying metals as conductors?</p> <p>Can they predict whether a particular arrangement of components will result in a bulb lighting?</p> <p>Can they predict how the operation of a switch will affect bulbs lighting?</p> <p>Can children understand how we stay safe when using electricity?</p>	<p>. Can they compare and contrast appliances that run on mains electricity with those that run on batteries?</p> <p>. Can they identify the functions of components within a circuit?</p> <p>. Can the investigate graphite as a conductor and relate to other materials?</p> <p>. Can they explain why certain arrangements will not result in the bulb lighting?</p> <p>. Can they explain how altering the location of a switch affects the operation of the circuit?</p>	<p>Identify common appliances that run on electricity.</p> <p>Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.</p> <p>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.</p> <p>Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.</p> <p>Recognise some common conductors and insulators, and associate metals with being good conductors.</p> <p>Ongoing working scientifically</p> <p>See the ongoing working scientifically skills. Mark as meeting on target tracker when demonstrated three times.</p>

<p>Sound</p> <p>On Going Skills: Can they set up simple practical enquiries? Can they record data in a variety of different ways? Can they report on their findings using presentations/diagrams e.t.c? Can they use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions? Can they take appropriate measurements?</p>	<p>Can they explain, with reference to vibrations, how an object makes a sound?</p> <p>Can they describe the role of a medium in the transmission of sound?</p> <p>Can they describe the effect of moving further from the source of a sound?</p> <p>Can they explain with reference to a particular object how the pitch of the sound can be changed?</p> <p>Can they explain with reference to a particular object how the volume of the sound can be changed (relate to vibrations)?</p> <p>Can children use their understanding of the volume of sounds to design a product to be used for sound insulation?</p>	<p>. Can they group sound-making objects in terms of how they make sounds?</p> <p>. Can they compare the effectiveness of different media in terms of their ability to transmit sound?</p> <p>. Can they explain with reference to examples how sounds get fainter as the distance from the source increases?</p> <p>Can they identify generic features that cause the pitch of a note to be changed?</p> <p>Can they identify generic features that cause the volume of a note to be changed?</p>	<p>Identify how sounds are made, associating some of them with something vibrating.</p> <p>Recognise that vibrations from sounds travel through a medium to the ear.</p> <p>Find patterns between the pitch of a sound and features of the object that produced it.</p> <p>Find patterns between the volume of a sound and the strength of the vibrations that produced it.</p> <p>Recognise that sounds get fainter as the distance from the sound source increases.</p> <p>Ongoing working scientifically</p> <p>See the ongoing working scientifically skills. Mark as meeting on target tracker when demonstrated three times.</p>
<p>States of matter</p> <p>On Going Skills: Can they use straightforward scientific evidence to answer questions or to support his/her findings? Can they identify differences/similarities in relation to simple scientific ideas?</p> <p>Can they set up simple practical enquiries?</p>	<p>Can they group materials according to their state of matter?</p> <p>Can they describe how evaporation and condensation happen in the water cycle, and how temperature affects evaporation?</p> <p>Can they identify changes of state and research values of degrees Celsius at which changes happen?</p>	<p>. Can they recognise that some materials (e.g. toothpaste) cannot be easily classified as solid, liquid or gas?</p> <p>. Can they apply the relationship between rate of evaporation with temperature to everyday contexts?</p> <p>. Can they suggest patterns in which kinds of materials change state at higher or lower temperatures?</p>	<p>. Compare and group materials together, according to whether they are solids, liquids or gases.</p> <p>. 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).</p> <p>. Identify the part played by evaporation and condensation in the water cycle, and associate the rate of evaporation with temperature.</p> <p>Ongoing working scientifically</p> <p>See the ongoing working scientifically skills. Mark as meeting on target tracker when demonstrated three times.</p>

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Year 5 Overview: Science

Title	Core Skills	Challenge	Target Tracker Statements
<p>Living things and their habitats</p> <p>On Going Working Scientifically Skills:</p> <ul style="list-style-type: none"> . Plan different types of enquiry . Taking measurements . Recording data . Using test results to make further predictions. . Reporting and presenting findings from enquiries. . Identifying scientific evidence <p>(for full explanation of skills see target tracker)</p>	<p>Can they identify similarities and differences in two different life cycles, e.g. sparrow and butterfly, with reference to eggs and intermediate stages?</p> <p>Can they describe in sequence the stages of reproduction in some plants and animals, e.g. dog and a thistle?</p>	<p>Can they suggest similarities in the life cycles of a number of vertebrates, e.g. comparison of dog, human and bird embryos?</p> <p>Can they compare the process of reproduction in animals and plants, e.g. compare and contrast fertilisation?</p>	<ul style="list-style-type: none"> . 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.
<p>Animals, including humans</p> <p>On Going Working Scientifically Skills:</p> <ul style="list-style-type: none"> . Plan different types of enquiry . Taking measurements . Recording data . Using test results to make further predictions. . Reporting and presenting findings from enquiries. . Identifying scientific evidence <p>(for full explanation of skills see target tracker)</p>	<p>Can they describe the changes as humans develop to old age, e.g. trends in changes to size, weight, mobility?</p>	<p>Can they suggest why some of the changes that take place in humans happen, e.g. suggest why babies have disproportionately large heads compared to adults?</p>	<ul style="list-style-type: none"> . Describe the changes as humans develop into old age.

<p>Properties and changes of materials</p> <p>On Going Working Scientifically Skills:</p> <ul style="list-style-type: none"> . Plan different types of enquiry . Taking measurements . Recording data . Using test results to make further predictions. . Reporting and presenting findings from enquiries. . Identifying scientific evidence (for full explanation of skills see target tracker) 	<p>Can they test and sort a range of materials based on their physical properties?</p> <p>Can they describe how some materials, e.g. sugar, will dissolve and can be retrieved?</p> <p>Can they justify separation techniques proposed, with reference to materials being separated?</p> <p>Can they show how the original materials can be retrieved from each of these changes?</p> <p>Can they identify reactants and products of chemical changes and recognise these as being irreversible?</p> <p>Can they use evidence to justify the selection of a material for a purpose?</p>	<p>Can they suggest why those properties might influence the selection of those materials for certain uses?</p> <p>Can they identify that some soluble materials are more soluble than others?</p> <p>Can they explain why a particular separation method might be more effective?</p> <p>Can they classify various processes relating to materials as reversible or irreversible?</p> <p>Can they provide examples of when changes being irreversible are a good thing, e.g. making bricks, or not, e.g. non-biodegradable plastic bags?</p> <p>Can they suggest limitations of the uses of selected materials based on test results?</p>	<p>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.</p> <p>Recognise that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.</p> <p>Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including by filtering, sieving and evaporating.</p> <p>Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.</p> <p>Demonstrate that dissolving, mixing and changes of state are reversible changes.</p> <p>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.</p>
<p>Earth and space</p> <p>On Going Working Scientifically Skills:</p> <ul style="list-style-type: none"> . Plan different types of enquiry . Taking measurements . Recording data . Using test results to make further predictions. . Reporting and presenting findings from enquiries. . Identifying scientific evidence (for full explanation of skills see target tracker) 	<p>Can they use a diagram or model to explain why the Sun seems to travel across the sky, and what causes day and night?</p> <p>Can they describe the Sun, Earth & Moon as spheres?</p> <p>Can they draw a diagram or use a model to describe the Moon's orbit around the Earth?</p> <p>Can they draw a diagram or use a model to describe planetary orbits?</p>	<p>Can they recognise that gravity acts between all masses, e.g. the Sun and the Earth?</p> <p>Can they identify ways in which forces that oppose motion may be useful (e.g. bicycle handlebar grips) or a nuisance (e.g. bicycle chain)?</p> <p>Can they explain the effect of a planet in the solar system rotating at a different rate to Earth?</p>	<p>Describe the movement of the Earth, and other planets, relative to the Sun in the solar system.</p> <p>Describe the movement of the Moon relative to the Earth.</p> <p>Describe the Sun, Earth and Moon as approximately spherical bodies.</p> <p>Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.</p>

<p>Forces</p> <p>On Going Working Scientifically Skills:</p> <ul style="list-style-type: none"> . Plan different types of enquiry . Taking measurements . Recording data . Using test results to make further predictions. . Reporting and presenting findings from enquiries. . Identifying scientific evidence <p>(for full explanation of skills see target tracker)</p>	<p>Can they describe how some devices may turn a smaller force into a larger one?</p> <p>Can they describe how motion may be resisted by air resistance, water resistance or friction?</p> <p>Can they explain that gravity causes objects to fall towards Earth?</p>	<p>Can they identify that the further out a planet is, the longer its orbit is around the Sun?</p> <p>Can they relate the Moon's orbit of the Earth to the Earth's orbit of the Sun?</p> <p>Can they recognise that many heavenly bodies are approximately spherical?</p> <p>Can they explain, with reference to everyday contexts, why a force multiplier might be useful?</p>	<p>Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.</p> <p>Identify the effects of air resistance, water resistance and friction that act between moving surfaces.</p> <p>Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</p>
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Year 6 Overview: Science

Title	Core Skills	Challenge	Target Tracker Statements
<p>Living things and their habitats</p> <p>On Going Working Scientifically Skills:</p>	<p>Can they use similarities and differences in observable features to decide how living things should be grouped, e.g. a cat is a mammal because it is warm blooded and gives birth to live young?</p> <p>Can they explain why certain features are useful in classifying living things, e.g. backbones in animals and flowers in plants?</p>	<p>Can they explore why some living things, such as the duck billed platypus, don't neatly fit into one group?</p> <p>Can they explain why other features are less useful as a basis for classification, such as size or colour?</p>	<p>Give reasons for classifying plants and animals based on specific characteristics.</p> <p>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.</p>
<p>Animals, including humans</p> <p>On Going Working Scientifically Skills:</p>	<p>Can they describe what heart, blood vessels and blood do, e.g. carry oxygen to all parts of the body?</p> <p>Can they suggest how their bodies are affected by substances and actions, e.g. that a high fat diet coupled with little exercise is likely to lead to obesity?</p> <p>Can they describe with aid of diagrams the route that water takes within animals, e.g. through the human body?</p>	<p>Can they explain some characteristics of the heart, blood vessels and blood, e.g. explain that the arteries are thicker because they carry blood at a higher pressure?</p> <p>Can they explain how decisions about lifestyle can affect the quality of life, e.g. recognise that making excessive use of convenience foods may introduce more additives into the diet?</p> <p>Can they compare the ways in which nutrients and water are transported in two animals that are quite different?</p>	<p>Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.</p> <p>Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.</p> <p>Describe the ways in which nutrients and water are transported within animals, including humans.</p>
<p>Evolution and inheritance</p> <p>On Going Working Scientifically Skills:</p>	<p>Can they use fossils as evidence that living things have changed over time, e.g. explain that these have died out and others have taken their place?</p> <p>Can they recognise that offspring normally vary from each other and from their parents, e.g. that puppies vary from each other and from their parents?</p> <p>Can they describe examples of a living thing that has adapted to live in a particular habitat and evolved as a result, e.g. a polar bear or cactus?</p>	<p>Can they suggest possible reasons for changes to living things over time, e.g. why penguins can't fly but are good at swimming?</p> <p>Can they recognise that selective breeding may result in offspring with certain features, e.g. pedigree dogs with a certain shape or colour?</p> <p>Can they give examples of living things that have evolved in different ways, e.g. different types of finch?</p>	<p>Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.</p> <p>Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.</p> <p>Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</p>

<p>Light</p> <p>On Going Working Scientifically Skills:</p>	<p>Represent light using straight line ray diagrams.</p> <p>Draw diagrams using straight lines showing light travelling to the eye.</p> <p>Explain how we can see an object by referring to light travelling into the eye.</p> <p>Draw a diagram showing an object, shadow and light to relate object shape to shadow shape.</p>	<p>Recognise that even when light changes in direction, the path is still continuous.</p> <p>Draw diagrams using straight lines showing light reflecting off objects and into the eye.</p> <p>Refer to the idea that some objects may be better reflectors than others.</p> <p>Use a diagram to explain that although a shadow is the same shape as the object, it may not be the same size.</p>	<p>Recognise that light appears to travel in straight lines.</p> <p>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.</p> <p>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.</p> <p>Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.</p>
<p>Electricity</p> <p>On Going Working Scientifically Skills:</p>	<p>Explain how number and voltage of cells affects the lamp or buzzer.</p> <p>Explain the use of switches, how bulbs can be made brighter and buzzers made louder.</p> <p>Represent a circuit that has been constructed using symbols.</p>	<p>Relate the number or voltage of cells to the number and operation of bulbs or buzzers that can be run from them.</p> <p>Explain the effect of changing the order of the components in a circuit.</p> <p>Design circuits using symbols.</p>	<p>Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.</p> <p>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.</p> <p>Use recognised symbols when representing a simple circuit in a diagram.</p>

