

Science Progression Framework

As a Scientist I can...

- **question** and **learn** from the world and beyond
- **plan** and **predict**
- **observe** using equipment
- **record, present** and **explain** my findings
- **understand scientific ideas** and **make links** between them

Focus	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Working Scientifically This is what our scientists can do....	*I can ask questions about the environment including the weather outside. *I can suggest what I might wear for different weather. *I can develop an understanding of growth, decay and changes over time and show care and concern for living things and the environment. *I can use my senses when walking around and investigating. *I can develop questioning and curiosity through play and understand the	*I can ask questions about the local environment including plants and animals found there including how I can look after them. *I can observe and talk about the weather and changes. *I can explore different materials using scientific language to describe them.	*I can ask questions about the local environment including discussing how plants grow, survive, germinate and reproduce. *I can investigate different habitats (incl. micro) and observe how different animals depend on each other and its life Processes. *I can understand the basic needs of animal survival including exercise and nutrition. *I can identify properties of materials and state why they are	*I can ask questions about the local environment and use my observation skills to identify parts of a flower and know how water transports around the plant. *I can understand the lifecycle of a plant by drawing diagrams and using research to find the function of each part. *I can understand that humans and animals have skeletons and understand why *I can explain how humans get nutrients.	*I can ask questions about the local environment and observe how the environment can change along with the dangers this can cause. *I can understand the functions of the teeth and the importance of oral hygiene. *I can explain how the digestive system works. *I can group, identify and classify living things and materials and using classification keys. *I can	*I can understand the changes that occur in humans from birth to old age and understand reproduction in plants and animals. *I can explore different lifecycles and can understand the similarities and differences between mammals, amphibians, insects and birds. *I can explain the uses of everyday materials and describe some reversible and irreversible changes.	*I can explain how the circulatory system works and will be able to use this to explain the positive and negative effects of diet, exercise, drugs and lifestyle on the body. *I can recall animals from the 5 vertebrate group and some From non-vertebrate groups including their key characteristics. *I can understand how plants and animals are

	<p>concept of forces and electricity through twisting, pushing, slotting and magnetic toys and seeing the effects of pushing different buttons to make sounds and movements. *I can talk about similarities and differences between living things and materials and make simple observations about animals.</p>		<p>suited to purpose. *I can name some scientists who have developed new materials.</p>	<p>*I can carry out comparative and fair tests to compare and classify rocks and soils based on their properties.</p>	<p>understand the water cycle and effect of heat with evaporation and condensation as well as materials changing state. *I can use representations to understand how we hear through vibrations and know how to create simple circuits including a switch. *I can carry out comparative and fair tests to test conductivity of materials.</p>	<p>*I can present my results from fair tests using tables and charts. *I can use diagrams to show the movement of the Earth and the moon and can explain how different time zones occur. *I can explain day and night. *I can understand forces including gravity, air resistance, water resistance and friction. *I can identify mechanisms such as levers, pulleys and gears to explain forces and making jobs easier.</p>	<p>suited to their environment and the process of evolution. *I can use classification keys to identify unknown plants. *I can explain what fossils are and can use research and observations to show that things lived billions of years ago. *I can use diagrams to explain how light travels and understand shadows. *I can make simple circuits using recognised symbols in their drawings. *I can conduct a range of fair tests identifying cause and effect when testing brightness of a bulb or volume of a buzzer. *I can conduct a range of Investigations with accuracy</p>
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							<p>using repeat measurements and using a range of equipment. *I can use scientific theory to refute or support their arguments.</p>
Plants	<p>*I can make simple observations about plants and can explain why some things occur.</p>	<p>*I can name common plants and describe the basic structure of flowering plants, including deciduous and evergreen. *I can identify and describe the basic structure of a variety of common flowering plants, including trees.</p>	<p>*I can observe and describe how seeds and bulbs grow into mature plants. *I can find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p>	<p>*I can identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. *I can 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. *I can investigate the way in which water is transported within plants. *I can explore the part that flowers play in the life cycle of flowering plants,</p>	<p>*I can recognise that living things can be grouped in a variety of ways. (Living Things and Habitats)</p>	<p>*I can describe the differences in the lifecycles of a mammal, an amphibian, an insect and a bird. *I can describe the life processes of reproduction in some plants and animals. (Living Things and Habitats)</p>	<p>*I can describe how living things are classified into broader groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals. *I can give reasons for classifying plants and animals based on specific characteristics. (Living Things and Habitats)</p>

				including pollination, seed formation and seed dispersal.			
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<p>Plants - Key indicators</p>	<p>The world: *I can develop an understanding of growth, decay and changes over time. *I can show concern and care for living things and the environment.</p>	<p>*I can name trees and other plants they see regularly. *I can describe key features of the trees and plants e.g. shapes of leaves/ colour of the flower/blossom. *I can point out trees which lost their leaves and those who keep them all year. *I can point to and name parts of a plant. *I can use simple charts to sort. *I can use photos to talk about how plants change.</p>	<p>*I can describe how plants that have grown from seeds and bulbs have developed over time. *I can identify plants that grew well in different conditions. *I can spot similarities and differences between bulbs and seeds. *I can nurture seeds and bulbs into mature plants identifying the different requirements of different plants.</p>	<p>*I can explain the function of the parts of a flowering plant. *I can describe the life cycle of flowering plants, including pollination, seed formation, seed dispersal and germination. *I can give different methods of pollination and seed dispersal, including examples. *I can explain observations made during investigations. *I can look at features of seeds to decide on the method of dispersal. *I can draw and label a diagram of their created flowering plant to show its parts and their role and method of pollination and seed dispersal.</p>	<p>(See Living Things and Habitats)</p>	<p>(See Living Things and Habitats)</p>	<p>(See Living Things and Habitats)</p>
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<p>Animals, including humans</p>	<p>Health and self-care- *I can notice changes in my body after exercise such as heart beating faster. *I can understand the importance of handwashing.</p>	<p>*I can identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. *I can identify and name a variety of common animals that are carnivores, herbivores and omnivores. *I can describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) *I can identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense</p>	<p>*I can notice that animals, including humans, have offspring which grow into adults. *I can find out about and describe the basic needs of animals, including humans, for survival (water, food and air) *I can describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p>	<p>*I can 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. *I can identify that humans and some other animals have skeletons and muscles for support, protection and movement.</p>	<p>*I can describe the simple functions of the basic parts of the digestive system in humans. *I can identify the different types of teeth in humans and their simple functions. *I can construct and interpret a variety of food chains, *I can identify producers, predators and prey.</p>	<p>*I can describe the difference in a lifecycle of a mammal, an amphibian, an insect and a bird. *I can describe the life processes of reproduction in some plants and animals. (Living Things and Habitats.) *I can describe the changes as humans develop from birth to old age.</p>	<p>*I can recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. *I can identify and name the main parts of the human circulatory system and describe the function of the heart, blood vessels and blood. *I can describe the ways in which nutrients and water are transported within animals, including humans.</p>
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<p>Animals, including humans - Key Indicators</p>	<p>*I can talk about simple similarities and differences between living things. * I can make simple observations about animals and explain why some things occur.</p>	<p>*I can name a range of animals which includes animals from each of the vertebrate groups. *I can describe the key features of named animals. *I can label key features on a picture/diagram. *I can write descriptively about an animal. *I can write a 'What am I?' riddle about an animal. *I can describe what a range of animals eat. *I can compare and classify animals.</p>	<p>*I can sequence the stages of a Baby and observe these changes. *I can describe how animals change as they get older. *I can develop an understanding of how insects change (more than a butterfly) through Lifecycle diagrams. *I can explain what humans and other animals need to survive- this could be through planning a trip to the moon or desert Island. *I can describe how to keep clean and healthy. Has a good understanding of the food plate and understands 'a healthy balanced diet'. *I can create a diet for an athlete.</p>	<p>*I can name the nutrients found in food. *I can state that to be healthy we need to eat the right types of food to give us the correct amount of these nutrients. *I can name some bones that make up the skeleton giving examples that support, help them move or provide protection. *I can describe how muscles and joints help them to move. *I can classify food groups (high/low nutrients), answer q's about nutrients in food, *I can use data to look for patterns. *I can give similarities and differences between skeletons.</p>	<p>*I can sequence the main parts of the digestive system. *I can draw the main parts of the digestive system onto a human outline. *I can describe what happens in each part of the digestive system. *I can point to three different types of teeth in their mouth and talk about what each is used for. *I can demonstrate the journey of food through the body. *I can make a dental record, *I can explain teeth in animals and if they are carnivores, herbivores or omnivores.</p>	<p>*I can explain the changes that takes place in boys and girls during puberty. *I can explain how a baby changes physically as it grows and also what it is able to do.</p>	<p>*I can draw a diagram of the circulatory system, label the parts and annotate it to show what the parts do. *I can explain the positive and negative effects on diet, exercise, drugs and lifestyle on the body.</p>
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			<p>*I can adopt a menu to substitute food from the eat well plate.</p> <p>*I can understand the effect of exercise on the body.</p>				
<p>Living Things</p> <p>Evolution and Inheritance</p>	<p>*I can similarities and differences between themselves and others, and among families, communities and traditions.</p> <p>*I can talk about my own environment</p> <p>The world:</p> <p>*I can show care and concern for living things and the environment</p>	<p>*I can name common plants and describe the basic structure of flowering plants, including trees. (Plants)</p> <p>*I can identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.</p> <p>*I can identify and name a variety of common animals that are herbivores, carnivores and omnivores.</p> <p>*I can describe and compare the structure of a variety of common animals</p>	<p>*I can explore and compare the differences between things that are living, dead, and things that have never been alive.</p> <p>*I can identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other.</p> <p>*I can identify and name a variety of plants and animals in their habitats, including</p>	<p>*I can identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. (Plants)</p>	<p>*I can recognise that living things can be grouped in a variety of ways.</p> <p>*I can explore and use Classification keys to help group, identify and name a variety of living things in their local environment.</p> <p>*I can recognise that environments can change and that this can sometimes pose dangers to living things.</p>	<p>*I can describe the differences in the lifecycles of a mammal, an amphibian, an insect and a bird.</p> <p>*I can describe the life processes of reproduction in some plants and animals.</p>	<p>*I can 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>*I can give reasons for classifying plants and animals based on specific characteristics</p> <p>Evolution and inheritance</p> <p>*I can recognise that living things produce offspring of the same</p>

		(fish, amphibians, reptiles, birds and mammals.) (Animals, including humans)	microhabitats *I can 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				kind, but normally offspring vary and are not identical to their parents. *I can identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. *I can recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.
Living Things			*I can find a range of items which are dead, living. *I can name plants/animals which live in different habitats and micro habitat. *I can talk about the features of the animal/plant		*I can name living things in a range of habitats, giving key features that helped identify them. *I can give examples of how an environment may change both naturally and due to human impact.	I can describe the lifecycles of mammals, amphibians and insects using diagrams. *I can describe similarities and differences between them.	*I can give examples of animals in the five vertebrate groups and some of the invertebrate groups. *I can give Key characteristics of the five Vertebrate groups and some
Evolution and Inheritance: Key Indicators							

and how they are suited to the habitat.
*I can talk about what the animal eats.
*I can construct a food chain.

*I can use Classification keys to identify unknown plants and animals.

Invertebrate groups.
*I can give examples of flowering and non-flowering plants.
*I can use classification keys to identify unknown plants and animals.
*I can create classification keys.
*I can give a number of characteristics that explain why an animal belongs to a particular group.
Evolution
*I can explain the process of evolution.
*I can give examples of how plants and animals are suited to their environment.
*I can give examples of how an animal or plant has evolved over time e.g. penguin, peppered moth.

							*I can give examples of things that lived millions of years ago and the fossil evidence to support this.
Materials Y3 - Rocks and Soils	<p>Moving and handling- *I can use the vocabulary of manipulation, e.g. squeeze and prod.</p> <p>The world: *I can talk about why things happen and how things work. *I can explore media and materials and notice changes in properties as they are transformed through becoming wet, dry, flaky or fixed. *I can think about cause and effect.</p>	<p>*I can distinguish between an object and the material from which it is made. *I can identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. *I can describe the simple physical properties of a variety of everyday materials. *I can compare and group together a variety of everyday materials on the basis of their simple physical properties.</p>	<p>*I can identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. *I can find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p>	<p>*I can notice that some forces need contact between two objects but magnetic forces can act at a distance. (Forces and Magnetism)</p> <p>Rocks and Soils *I can compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. *I can describe in simple terms how fossils are formed when things that have lived are trapped within a rock. *I can recognise that soils are made from rocks</p>	<p>STATES OF MATTER *I can compare and group materials together, according to whether they are solids, liquids or gases (states of matter)</p> <p>*I can 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 (States of matter) *I can identify the part played by evaporation and condensation in the water cycle</p>	<p>*I can 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. *I can explain that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution. *I can use my knowledge of solids, liquids gases to decide</p>	<p>*I can recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. (Evolution and Inheritance)</p>

				and organic matter	and associate the rate of evaporation with temperature. (states of matter)	how mixtures might be separated, including through filtering, sieving and evaporating. *I can give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals wood and plastic. *I can demonstrate that dissolving, mixing and changes of state are reversible changes. *I can explain that some changes result in the formation of new materials and this kind of change is not usually reversible, including changes associated with burning and the action of acid on	
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						bicarbonate of soda.	
Materials Y3 - Rocks and Soils: Key Indicators	<p>*I can talk about simple similarities and differences between two materials.</p>	<p>*I can label a picture/diagram of an object made from different materials. *I can describe the properties of materials. *I can sort materials using their properties. *I can test evidence to answer a question.</p>	<p>*I can name an object, say what material it is made from, identify properties and make a link between property and use. Whilst changing a shape of an object can describe the actions used. *I can use suitable vocabulary. *I can carry out simple tests relevant to properties. *I can describe similarities and differences.</p>	<p>*I can name some types of rock and give physical features of each. Can explain how a fossil is formed. *I can explain that soils are made from rocks and also contain living/dead matter. *I can classify rocks in a range of ways using scientific vocabulary. Test properties of rocks. Show understanding of how fossils were formed, *I can identify plant/animal matter in soil, test water retention of soils. (Rocks and soils)</p>	<p>*I can create a concept map, including arrows linking the key vocabulary. *I can name properties of solids, liquids and gases. *I can give everyday examples of melting and freezing. *I can give everyday examples of evaporation and condensation. *I can describe the water cycle. *I can give reasons to justify why something is a solid liquid or gas. *I can give examples of things that melt/freeze and how their melting points vary from their observations, can give the melting points of some</p>	<p>*I can explain everyday uses of material e.g. how bricks, wood, glass are used in buildings. *I can explain what dissolving is, giving examples. *I can name equipment used for filtering and sieving. *I can use knowledge of liquids, gases and solids to suggest how materials can be recovered from solutions or mixtures by evaporation, filtering or sieving. *I can describe simple reversible and non-reversible changes to materials, giving examples. *I can create chart/table Grouping</p>	

					<p>materials.</p> <p>*I can use my data, and explain what affects how quickly a solid melts.</p> <p>*I can measure temperatures using a thermometer.</p> <p>*I can explain why there is condensation on the inside of the hot water cup but on the outside of the icy water cup.</p> <p>*I can use my data to explain how to speed up or slow down evaporation.</p> <p>*I can present my learning about the water cycle in a range of ways e.g. diagrams, explanation text, story of a water droplet.</p>	<p>materials using Properties.</p> <p>Suggest appropriate material for purpose.</p> <p>*I can explain results from investigations involving dissolving and non-reversible change.</p>	
<p>Seasonal Changes</p> <p>Earth and Space</p>	<p>*I can show concern and care for the environment and can notice changes and differences.</p> <p>*I can develop an</p>	<p>*I can observe changes across the four seasons.</p> <p>*I can observe and describe weather associated with the seasons and</p>		<p>*I can recognise that I need light in order to see things and that dark is the absence of light.</p> <p>*I can notice that light is reflected</p>		<p>*I can explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the</p>	<p>*I can use the idea that light travels in straight lines to explain why shadows have the same shape as the object that casts</p>

	understanding of decay and changing over time.	how day length varies.		from surfaces. *I can recognise that light from the sun can be dangerous and that there are ways to protect our eyes. *I can recognise that shadows are formed when the light source is blocked by a solid object. *I can find patterns in the way the size of the shadows change. (Light)		falling object. (Forces) Earth and Space *I can describe the movement of the Earth and other planets, relative to the Sun in the solar system. *I can describe the movement of the moon, relative to the Earth. *I can describe the Sun, Earth and Moon as approximately spherical bodies. *I can use Earth's rotation to explain day and night due to the apparent movement of the Sun across the sky.	them. (Light)
Seasonal Changes Earth and Space: Key Indicators	*I can describe the weather outside and suggest what they might wear and what they might see. *I can comment on the	*I can name four seasons and identify when in the year they occur. *I can observe and describe weather in different seasons.		See Light		*I can show using diagrams the movement of the Earth and moon. *I can explain the rotation of the Earth and how this causes night and day.	See Light

	environment e.g. the leaves have fallen off the tree, there is a puddle.	<p>*I can describe days being longer in summer and shorter in winter.</p> <p>*I can present data in tables charts and compare seasons</p> <p>.</p>				<p>*I can explain evidence gathered about the position of shadows in terms of movement of the Earth.</p> <p>*I can explain how a sundial works.</p> <p>*I can explain why we have time zones.</p>	
Light and Sound	The world: *I can respond to my senses: sights, sounds and smells in the environment.	<p>*I can describe the simple physical properties of a variety of everyday materials.</p> <p>*I can compare and group together a variety of everyday materials on the basis of their simple physical properties. (Materials)</p> <p>*I can observe changes across the four seasons.</p> <p>*I can observe and describe weather associated with the seasons and how day length</p>	<p>*I can identify and compare the suitability of a variety of everyday materials including, wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. (Materials)</p> <p>*I can find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. (Plants)</p>	<p>*I can 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. (Plants)</p> <p>*I can recognise that they need light in order to see things and dark is the absence of light.</p> <p>*I can notice that light is reflected from surfaces.</p> <p>*I can recognise that light from the Sun can be dangerous and that there are</p>	<p>*I can recognise that environments can change and that this can sometimes pose dangers to living things. (Living Things and Habitats)</p> <p>Sound</p> <p>*I can identify how sounds are made, associating some of them with something vibrating.</p> <p>*I can recognise that vibrations from sounds travel through a medium to the ear,</p>	<p>*I can compare and group everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal) and response to magnets. (Materials)</p> <p>*I can use Earth's rotation to explain day and night due to the apparent movement of the Sun across the sky. (Earth and</p>	<p>*I can recognise that light travels in straight lines.</p> <p>*I can 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>*I can 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>*I can use the idea that light travels in straight lines to</p>

		<p>varies. (Seasonal Changes) *I can identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. (Animals and Humans)</p>		<p>ways to protect our eyes. *I can recognise that shadows are formed when the light source is blocked by a solid object. *I can find patterns in the way the size of the shadows change.</p>	<p>*I can find patterns between the pitch of a sound and features of the object that produced it. *I can find patterns between the volume of a sound and the strength of the vibrations that produced it. *I can recognise that sound gets fainter as the distance from the sound increases.</p>	Space)	<p>explain why shadows have the same shape as the object that casts them.</p>
<p>Light and Sound: Key Indicators</p>		<p>See Seasonal Changes See Animals Including Humans</p>		<p>*I can describe how we see objects in light and can describe dark as the absence of light. Know it is dangerous to look at the sun. Define transparent, translucent and opaque. *I can describe how shadows are formed. Predict what materials will be more/less visible.</p>	<p>*I can describe different types of objects producing different sounds and that the sound is produced by vibration in the object. *I can describe sounds travelling through different mediums such as air, water, metal. *I can find patterns between pitch and volume</p>	(See Earth and Space)	<p>*I can describe with diagrams how light travels in straight lines, either from sources or reflected from other objects into our eyes. *I can describe with diagrams how light travels in straight lines past translucent or opaque objects to form a shadow of the same shape.</p>

					<p>and the features of the object producing it.</p> <p>*I can recognise that sounds get fainter as the distance from the sound source increases.</p> <p>*I can explain what happens when you strike a drum or pluck a string- use diagrams to show.</p> <p>*I can demonstrate how to increase/ decrease pitch and volume.</p>	
Forces	<p>Moving and handling-</p> <p>*I can introduce and encourage children to use the vocabulary of manipulation, e.g squeeze and prod.</p> <p>Technology-</p> <p>*I can show an interest in technological toys with knobs or pulleys, or real objects such as cameras or</p>	<p>*I can describe the simple physical properties of a variety of everyday materials.</p> <p>*I can compare and group together a variety of everyday materials on the basis of their simple physical properties.</p> <p>(Materials)</p>	<p>*I can identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</p> <p>*I can find out how the shapes of solid objects made from some materials can be</p>	<p>*I can compare how things move on different surfaces</p> <p>*I can notice that some forces need contact between two objects, but magnetic forces can act at a distance.</p> <p>*I can observe how magnets attract or repel each other and attract some</p>		<p>*I can explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.</p> <p>*I can identify the effects of air resistance, water resistance and friction that act between moving surfaces.</p> <p>*I can recognise</p>

	mobile phones.		changed by squashing, bending, twisting and stretching. (Materials)	materials and not others. *I can 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. *I can describe magnets as having two poles. Predict whether two magnets will attract or repel each other, depending on which poles are facing.		that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. *I can describe the movements of the Earth, and other planets, relative to the Sun in the solar system (Earth and Space)	
Forces: Key indicators	*I can play with a range of toys of varying sizes made of different materials and fit them together in different ways such as twisting, pushing, slotting or magnetism. *I can manipulate playdough in different ways.	See Materials	See Materials	*I can give examples of forces in everyday life. *I can give examples of objects moving differently on different surfaces. *I can name a range of magnets and show how the poles attract		*I can demonstrate the effect of gravity acting on an unsupported object. *I can give examples of friction, water resistance and air resistance. *I can give examples of when it is	

				<p>and repel. *I can draw diagrams using arrows to show the attraction and repulsion between the poles of magnets. *I can use results to describe how objects move on different surfaces. *I can use results to make predictions. *I can use some classification to know some metals are not magnetic. Use test data to rank magnets.</p>		<p>beneficial to have high or low friction, water resistance, and air resistance. *I can demonstrate how pulleys, levers and gears work.</p>	
Electricity	<p>Technology- *I can use my skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movement or new images.</p>	<p>*I can describe the simple physical properties of a variety of everyday materials. *I can compare and group together a variety of everyday materials on the basis of their simple physical</p>	<p>*I can identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic glass, brick, rock, paper and cardboard for particular uses. (Materials)</p>		<p>*I can identify common appliances that run on electricity. *I can construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. *I can identify</p>	<p>*I can compare and group everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal) and response to</p>	<p>*I can associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the*I can circuit. *I can compare and give reasons for variations in how components function,</p>

		properties. (Materials)			<p>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>*I can 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>*I can recognise some common conductors and insulators, and associate metals with being good conductors.</p>	magnets. (Materials)	<p>including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.</p> <p>*I can use recognised symbols when representing a simple circuit in a diagram.</p>
Electricity: Key Indicators					<p>*I can name the components in a circuit.</p> <p>*I can make an electric circuit.</p> <p>*I can control a circuit using a switch.</p> <p>*I can name some metals that are conductors.</p> <p>*I can name materials that are</p>		<p>*I can explain how a circuit operates to achieve particular operations, such as control the light for a torch with different brightnesses or make a motor go faster or slower</p> <p>*I can make circuits to solve</p>

					<p>insulators. *I can communicate structures of circuits using drawings. *I can incorporate a switch. *I can add a circuit with a switch to a DT project and demonstrate how it works. *I can describe how a switch works.</p>		<p>particular problems such as a quiet and a loud burglar alarm *I can carry out fair tests exploring changes in circuits *I can make circuits that can be controlled as part of a D&T project</p>
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