Farnborough Primary School Progression of Knowledge and Skills Science

	Plants	Living things and their habitats	Animals including humans	Evolution and inheritance	Seasonal Changes	Materials	Rocks	Light	Forces	Sound	Earth and Space
EYFS	I can draw information from a simple map. (Reception – Living things and their habitats) I can explore the natural world around me. (Reception – Living things and their habitats) I can describe what I see, hear, and feel whilst outside. (Reception – Living things and their habitats) I can recognise some environments that are different to the one in which I live. (Reception – Living things and their habitats) I can understand the effect of changing seasons on the natural world around them. (Reception – Seasonal changes)	I can draw information from a simple map. I can explore the natural world around me. I can describe what I see, hear, and feel whilst outside. I can recognise some environments that are different to the one in which I live.	I can talk about members of my immediate family and community. I can name and describe people who are familiar to me. I can recognise some environments that are different to the one in which I live.	I can recognise some environments that are different to the one in which I live. (Reception – Living things and their habitats)	I can explore the natural world around them. I can describe what they see, hear, and feel whilst outside. I can understand the effect of changing seasons on the natural world around them	I can explore the natural world around me. I can describe what I see, hear and feel whilst outside.	I can explore the natural world around me. (Reception – Living things and their habitats) I can describe what I see, hear, and feel whilst outside. (Reception – Living things and their habitats)	I can describe what I see, hear and feel whilst outside.	I can explore the natural world around me. I can describe what I see, hear and feel whilst outside.	I can describe what I see, hear and feel whilst outside.	I can explore the natural world around me. I can describe what I see, hear and feel whilst outside.

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	Plants	Living things and their habitats	Animals including humans	Seasonal Changes	Materials	Rocks	Light	Sound	Earth and Space
Year 1	I can identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. I can identify and describe the basic structure of a variety of common flowering plants, including trees.	I can identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. (Y1 - Plants) I can identify and describe the basic structure of a variety of common flowering plants, including trees. (Y1 - Plants) I can identify and name a variety of common animals including fish, amphibians, reptiles, birds, and mammals. (Y1 - Animals including humans) I can identify and name a variety of common animals that are carnivores, herbivores, and omnivores. (Y1 - Animals including humans) I can describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). (Y1 – Animals, including humans) I can observe changes across the four seasons. (Y1 - Seasonal change)	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.	I can observe changes across the four seasons. I can observe and describe weather associated with the seasons and how day length varies	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. • 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.	I can distinguish between an object and the material from which it is made. (Y1 - Everyday materials) I can identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. (Y1 - Everyday materials) I can describe the simple physical properties of a variety of everyday materials. (Y1 - Everyday materials) I can compare and group together a variety of everyday materials on the basis of their simple physical properties. (Y1 - Everyday materials)	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. (Y1 - Animals, including humans) I can describe the simple physical properties of a variety of everyday materials. (Y1 - Materials)	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. (Y1 - Animals, including humans)	I can observe changes across the four seasons. (Y1 – Seasonal changes) I can observe and describe weather associated with the seasons and how day length varies. (Y1 – Seasonal changes)

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	Plants	Living things and their habitats	Animals including humans	Evolution and inheritance	Materials	Rocks	Forces
Year 2	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. I can identify and name a variety of plants and animals in their habitats, including microhabitats. (Y2 - Living things and their habitats)	I can explore and compare the differences between things that are living, dead, and things that have never been alive. 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. I can identify and name a variety of plants and animals in their habitats, including 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. I can notice that animals, including humans, have offspring which grow into adults. (Y2 - Animals including humans)	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. 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. (Y2 - Living things and their habitats)	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. (Y2 - Living things and their habitats) I can notice that animals, including humans, have offspring which grow into adults. (Y2 - Animals, including humans)	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.	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. (Y2 - Uses of everyday materials)	I can find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. (Y2 - Uses of everyday materials)

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	Plants	Living things and their habitats	Animals including humans	Evolution and inheritance	Seasonal Changes	Materials	Rocks	Light	Forces
Year 3	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, including pollination, seed formation and seed dispersal.	I can explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. (Y3 - Plants)	I can identify that animal, 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.	I can describe in simple terms how fossils are formed when things that have lived are trapped within rock. (Y3 - Rocks) I can explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. (Y3 - Plants)	I can recognise that light from the sun can be dangerous and that there are ways to protect their eyes. (Y3 - Light)	I can compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. (Y3 - Rocks) I can describe in simple terms how fossils are formed when things that have lived are trapped within rock. (Y3 - Rocks) 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. (Y3 - Forces and magnets)	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 rock. I can recognise that soils are made from rocks and organic matter.	I can recognise that they need light in order to see things and that dark is the absence of light. I can notice that light is reflected from surfaces. I can recognise that light from the sun can be dangerous and that there are ways to protect their eyes. I can recognise that shadows are formed when the light from a light source is blocked by an opaque object. I can find patterns in the way that the size of shadows change.	I can compare how things move on different surfaces. I can notice that some forces need contact between two objects, but magnetic forces can act at a distance. I can observe how magnets attract or repel each other and attract some 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. I can predict whether two magnets will attract or repel each other, depending on which poles are facing.

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	Plants	Living things and their habitats	Animals including humans	Evolution and inheritance	Materials	Sound	Electricity
Year 4	I can recognise that living things can be grouped in a variety of ways. (Y4 - Living things and their habitats) I can explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. (Y4 - Living things and their habitats) I can recognise that environments can change and that this can sometimes pose dangers to living things. (Y4 - Living things and their habitats)	I can recognise that living things can be grouped in a variety of ways. I can explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment I can recognise that environments can change and that this can sometimes pose dangers to living things. I can construct and interpret a variety of food chains, identifying producers, predators and prey. (Y4 - Animals, including humans)	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, identifying producers, predators and prey.	I can recognise that environments can change and that this can sometimes pose dangers to living things. (Y4 - Living things and their habitats)	I can compare and group materials together, according to whether they are solids, liquids or gases. 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 (°C). I can identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. I can recognise some common conductors and insulators, and associate metals with being good conductors. (Y4 - Electricity)	I can identify how sounds are made, associating some of them with something vibrating. I can recognise that vibrations from sounds travel through a medium to the ear. 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. Recognise that sounds get fainter as the distance from the sound source increases.	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 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. 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. I can recognise some common conductors and insulators, and associate metals with being good conductors.

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	Plants	Living things and their habitats	Animals including humans	Evolution and inheritance	Seasonal Changes	Materials	Light	Forces	Earth and Space
Year 5	I can describe the life process of reproduction in some plants and animals. (Y5 - Living things and their habitats)	I can describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. I can describe the life process of reproduction in some plants and animals.	I can describe the changes as humans develop to old age. I can describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. (Y5 - Living things and their habitats) I can describe the life process of reproduction in some plants and animals. (Y5 - Living things and their habitats)	I can describe the life process of reproduction in some plants and animals. (Living things and their habitats - Y5)	I can use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky. (Y5 - Earth and space)	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 know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution. I can use knowledge of solids, liquids and gases to decide 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 that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.	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. (Y5 - Properties and changes of materials)	I can explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. I can identify the effects of air resistance, water resistance and friction, that act between moving surfaces. I can recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.	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 the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.

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	Plants	Living things and their habitats	Animals including humans	Evolution and inheritance	Rocks	Light	Electricity
Year 6	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. (Y6 - Living things and their habitats) I can give reasons for classifying plants and animals based on specific characteristics. (Y6 - Living things and their habitats)	I can describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals. I can give reasons for classifying plants and animals based on specific characteristics. I can recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. (Y6 - Evolution and inheritance) I can identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. (Y6 - Evolution and inheritance)	I can identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. I can recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. I can describe the ways in which nutrients and water are transported within animals, including humans. 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. (Y6 - Living things and their habitats) I can give reasons for classifying plants and animals based on specific characteristics. (Y6 - Living things and their habitats)	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. I can recognise that living things produce offspring of the same 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. (Y6 - Evolution and inheritance)	I can recognise that light appears to travel in straight lines. 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. 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. I can use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.	I can associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. I can 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. I can use recognised symbols when representing a simple circuit in a diagram.