



Generative learning in Science at Hayfield Lane

Subject lead: K.Fleming



Progression in knowledge— Plants

*Statements in yellow link to previous learning

*Statements in red are from other linked topics within Science

F1	<ul style="list-style-type: none"> I can explore natural things going on around me. I can show care for my environment, animals and plants. I can talk about the key features of life cycles using appropriate vocabulary. I can talk about the world around me, observing animals and plants.
F2	<ul style="list-style-type: none"> I can talk about what I can see outside using wide vocabulary. I can describe what I can see, hear and feel outside. I can describe animals and plants (both from photographs and real-life experiences). I can explore the natural world and make observations of animals and plants and use these observations to draw pictures. (In F1, children gain an awareness of plant growth/new life through planting cress. In F2, children are introduced to terms such as leaves, stem, roots and get an awareness of growth and decay through their 'Wanderlust' approach. They are exposed to plant growth through growing a beanstalk.) <p>Early Learning Goal:</p> <ul style="list-style-type: none"> Explore the natural world around them making observations and drawing pictures of animals and plants Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read. Understand some important processes and changes in the natural world around them.
Year 1	<ul style="list-style-type: none"> Observe changes across the 4 seasons (Seasonal changes)
Year 2	<ul style="list-style-type: none"> Identify and name a variety of common wild and garden plants inc. deciduous and evergreen trees Identify and describe the basic structure of a variety of common flowering plants inc. trees (In F2, children are introduced to terms such as leaves, stem, roots by the teacher on their walks around the school ground and they get an awareness of growth and decay through their 'Wanderlust' approach. They are exposed to plant growth through growing a beanstalk. In y2 pupils learn about the basic structure of common plants and are expected to be able to label these independently. They are not expected to know/recall the functions of these parts but will be made aware of them ready for y3). Observe and describe how seeds and bulbs grow into mature plants Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy Explore and compare the differences between things that are living, dead, and things that have never been alive. (Living Things and their habitats) 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. (Living Things and their habitats) Identify and name a variety of plants and animals in their habitats inc. micro-habitats. (Living Things and their habitats) 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. (Living Things and their habitats)
Year 3	<ul style="list-style-type: none"> Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. (In Year 2, pupils learn about the basic structure of common flowering plants, including trees. In year 3, they will revisit these and progress to describing the functions of these parts independently. 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. (In Year 2, pupils find out and describe how plants need water, light and a suitable temperature to grow. They do this through growing sunflowers. In year 3, they progress to learning about the 5 requirements for growth.) Investigate the way in which water is transported within plants Explore the part that flowers play in the life cycle of flowering plants, inc. pollination, seed formation and seed dispersal
Year 4	<ul style="list-style-type: none"> Recognise that living things can be grouped in a variety of ways. (Living Things and their habitats) Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. (Living Things and their habitats) Recognise that environments can change and that this can sometimes pose dangers to living things. (Living Things and their habitats)
Year 5	
Year 6	<ul style="list-style-type: none"> Describe the life process of reproduction in some plants and animals. (Living Things and their habitats) Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, inc. micro-organisms, plants and animals. (Living Things and their habitats) Give reasons for classifying plants and animals based on specific characteristics. (Living Things and their habitats) 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) Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. (Evolution and Inheritance) Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. (Evolution and Inheritance)

Progression in knowledge— Living things and their habitats

*Statements in yellow link to previous learning

*Statements in red are from other linked topics within Science

F1	<ul style="list-style-type: none"> I can explore natural things going on around me. I can show care for my environment, animals and plants. I can talk about the key features of life cycles using appropriate vocabulary. I can talk about the world around me, observing animals and plants.
F2	<ul style="list-style-type: none"> I can talk about what I can see outside using a wide vocabulary. I can describe what I can see, hear and feel outside. I can describe animals and plants (both from photos and real-life experiences). (In F1, children explore 'new life' and 'caring for animals' through their chick hatching project. In F2 children explore where animals live and what they might need to live. They look at how different animals can live in different places/countries and how animals look depend on where they live, E.g Polar bears are white to camouflage in the snow. Hibernation is also studied which links with seasons. Children constantly explore living things and their habitats through 'Small world exploration play'.) I can describe other environments to my own e.g desert, arctic etc. I can contrast the natural world around me with different environments. <p>Early Learning Goal:</p> <ul style="list-style-type: none"> Explore the natural world around them making observations and drawing pictures of animals and plants Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read.
Year 1	<ul style="list-style-type: none"> Identify and name a variety of common animals inc. fish, amphibians, reptiles birds and mammals (Animals including humans) Identify and name a variety of common animals that are carnivores, herbivores and omnivores. (Animals including humans) Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles birds and mammals inc. pets) (Animals including humans) Find out about and describe the basic needs of animals, inc. humans for survival (water, food and air). (Animals including humans)
Year 2	<ul style="list-style-type: none"> Explore and compare the differences between things that are living, dead, and things that have never been alive. 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. (In F2, children explore where animals live and what they might need to live. They look at how different animals can live in different places/countries and how animals look depend on where they live, E.g Polar bears are white to camouflage in the snow. Hibernation is also studied which links with seasons. Children constantly explore living things and their habitats through 'Small world exploration play. In y2, children are taught that living things live in a suitable habitat which provide for their basic needs.) Identify and name a variety of plants and animals in their habitats inc. micro-habitats . (In F2, children begin to match animals to their appropriate habitats and they begin to talk about why the environment is appropriate for the animal. In y2, children will name plants and animals in their habitats and will pay particular attention to micro-habitats.) 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
Year 3	
Year 4	<ul style="list-style-type: none"> Recognise that living things can be grouped in a variety of ways. Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment Recognise that environments can change and that this can sometimes pose dangers to living things (In year 2, children identify and name a variety of animals in their habitats, including micro-habitats. They learn that animals live in a suitable environment for them. Within Y4, children progress by exploring classification keys. They place given species into a classification key based on the questions. Children begin to classify given animals.) Construct and interpret a variety of food chains, identifying producers, predators and prey. (Animals inc humans)
Year 5	
Year 6	<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 Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, inc. micro-organisms, plants and animals (Within Y4, children explore classification keys by placing given species into a classification key based on the questions. Children begin to classify given animals. Within Y6, children are expected to create their own classification key for a variety of plants, animals and micro-organisms.) Give reasons for classifying plants and animals based on specific characteristics Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. (Evolution and Inheritance) Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. (Evolution and Inheritance)

Progression in knowledge— Animals including humans

*Statements in yellow link to previous learning

*Statements in red are from other linked topics within Science

F1	<ul style="list-style-type: none"> I can show care for my environment, animals and plants. I can talk about the key features of life cycles using appropriate vocabulary. I can talk about the world around me observing animals and plants.
F2	<ul style="list-style-type: none"> I can talk about what I can see outside using wide vocabulary. I can describe animals and plants (both from photos and real-life experiences). I can make observations of animals and plants and use these observations to draw pictures. <p>Early Learning Goal:</p> <ul style="list-style-type: none"> Explore the natural world around them making observations and drawing pictures of animals and plants
Year 1	<ul style="list-style-type: none"> Identify and name a variety of common animals inc. fish, amphibians, reptiles birds and mammals Identify and name a variety of common animals that are carnivores, herbivores and omnivores. Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles birds and mammals inc. pets) Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense Notice that animals, inc. humans, have offspring, which grow into adults Find out about and describe the basic needs of animals, inc. humans for survival (water, food and air) (Look at the basic requirements of what animals and humans need to survive. Y2 begin to look at the different types of foods and what a healthy meal consists of.)
Year 2	<ul style="list-style-type: none"> Describe the importance for humans of exercise, eating the right amount of different types of food, and hygiene. (Y1 look at the basic needs of animals for survival including water, food and air. Y2 to introduce the difference food categories e.g carbohydrates, fibre etc. Y4 progress by comparing the diets of animals compared to humans and how they require a different weighting of food types.) 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. (Living things and their habitats)
Year 3	
Year 4	<ul style="list-style-type: none"> Identify that animals, inc. humans needs the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat. (Y1 look at the basic needs of animals for survival including water, food and air. In y2, they look at the importance of healthy eating and healthy lifestyle through an investigation. They look at the food pyramid which shows how much of a food group is needed for a healthy diet and children use this information to decide if their favorite meal is healthy or not. Y4 progress by comparing the diets of animals compared to humans and how they require a different weighting of food types.) Identify that humans and some other animals have skeletons and muscles for support, protection and movement. Describe the simple functions of the basic parts of the digestive system in humans Identify the different types of teeth in humans and their simple functions Construct and interpret a variety of food chains, identifying producers, predators and prey. (Previous learning happens in y2 where they describe how animals obtain their food from plants and other animals, using the simple idea of a simple food chain, and identify and name different sources of food. See Living things and their habitats). Recognise that environments can change and that this can sometimes pose dangers to living things. (Living things and their habitats)
Year 5	
Year 6	<ul style="list-style-type: none"> Describe the changes as humans develop to old age Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. Describe the ways in which nutrients and water are transported within animals, inc. humans. (Y4 compare the diets of animals compared to humans and how they require a different weighting of food types to get their nutrition. Y6 use flow charts to learn about how nutrients and water are transported within animals including humans. They focus heavily on the tier 2/3 scientific vocabulary and children are expected to apply to a human flow chart demonstration.) Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. (Living things and their habitats) Describe the life process of reproduction in some plants and animals. (Living things and their habitats) Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, inc. micro-organisms, plants and animals. (Living things and their habitats) Give reasons for classifying plants and animals based on specific characteristics. (Living things and their habitats)

Progression in knowledge— Evolution and inheritance

*Statements in yellow link to previous learning

*Statements in red are from other linked topics within Science

F1	
F2	
Year 1	<ul style="list-style-type: none">• Notice that animals, inc. humans, have offspring, which grow into adults. (Animals including humans)
Year 2	<ul style="list-style-type: none">• 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. (Living things and their habitats)
Year 3	<ul style="list-style-type: none">• Describe in simple terms how fossils are formed when things that have lived are trapped within rock. (Living things and their habitats)• Explore the part that flowers play in the life cycle of flowering plants, inc. pollination, seed formation and seed dispersal. (Plants)
Year 4	<ul style="list-style-type: none">• Recognise that environments can change and that this can sometimes pose dangers to living things. (Living things and their habitats)
Year 5	
Year 6	<ul style="list-style-type: none">• Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.• Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.• Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.• Describe the life process of reproduction in some plants and animals. (Living things and their habitats)

Progression in knowledge— Seasonal changes

*Statements in yellow link to previous learning

*Statements in red are from other linked topics within Science

F1	<ul style="list-style-type: none"> I can explore natural things going on around me.
F2	<ul style="list-style-type: none"> I can talk about what I can see outside using a wide vocabulary. I can describe what I can see, hear and feel outside. I can talk about the area I live in, including the weather etc. I can describe my own and other environments e.g deserts, Artic etc. I can talk about some of the changes in the natural world, including seasons. (In F2, seasonal changes is an integral part of daily routines where they look at weather, weather surveys, track the weather, go on seasonal walks etc. Their wanderlust approach is linked to around seasonal change and growth and decay of plants. They make calendars which are based around seasons. Children look at what we wear within seasons and they are introduced to scientific terms such as evaporation/melting e.g where have the puddles gone? Where has the ice gone? Children also discuss what activities we can do at different times of the year e.g sledging in the snow. Y1 carry out constant observations and discussions on the weather and how the environment outside is changing based on the season. Poetry links to Autumn and the associated changes linked to that season. Classroom display linked to seasons is updated when the season changes and related vocabulary is displayed linked to the seasons.) <p><u>Early Learning Goal:</u></p> <ul style="list-style-type: none"> Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read. Understand some important processes and changes in the natural world around them.
Year 1	<ul style="list-style-type: none"> Observe changes across the 4 seasons. (Y1 carry out constant observations and discussions on the weather and how the environment outside is changing based on the season. Poetry links to Autumn and the associated changes linked to that season. Classroom display linked to seasons is updated when the season changes and related vocabulary is displayed linked to the seasons.) Observe and describe weather associated with the seasons and how day length varies. (y1 introduce how the day length varies linked to the seasons.)
Year 2	
Year 3	<ul style="list-style-type: none"> Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. (Light)
Year 4	
Year 5	<ul style="list-style-type: none"> Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky. (Earth and Space)
Year 6	

Progression in knowledge— Materials

*Statements in yellow link to previous learning

*Statements in red are from other linked topics within Science

F1	<ul style="list-style-type: none"> I enjoy exploring natural materials indoors and outdoors. I can explore natural and man-made materials. I can talk about natural and man-made materials using vocabulary linked to my senses.
F2	<ul style="list-style-type: none"> I can change materials e.g adding water to cornflour, mixing paint etc. I can talk about the differences in materials. <p><u>Early Learning Goal:</u></p> <ul style="list-style-type: none"> Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read. Understand some important processes and changes in the natural world around them.
Year 1	<ul style="list-style-type: none"> Distinguish between an object and the material from which it is made. (Link to previous knowledge from F1 where they explored natural and man-made materials) Identify and name a variety of everyday materials inc. wood, plastic, glass, metal, water and rock (Link to previous knowledge of materials from F2 where they explored differences in materials) Describe the simple physical properties of a variety of everyday materials (Link to previous knowledge of materials from F2 where they explored differences in materials) Compare and group together a variety of everyday materials on the basis of their simple physical properties
Year 2	
Year 3	<ul style="list-style-type: none"> Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties (Rocks) Describe in simple terms how fossils are formed when things that have lived are trapped within rock. (Rocks) 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. (Forces and magnets)
Year 4	<ul style="list-style-type: none"> Compare and group materials together, according to whether they are solids, liquids or gases. (States of Matter) (Y5 progress by looking at how mixtures may be separated through filtering/sieving and evaporating). 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) (States of matter) (y5 progress by demonstrating how dissolving, mixing and changing of state are reversible changes) Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. (States of matter).
Year 5	<ul style="list-style-type: none"> Compare and group together everyday materials on the basis of their properties inc. their hardness, solubility, transparency, conductivity (electrical and thermal) and response to magnets. (Previous learning from year 1 where they grouped materials based on their simple physical properties. In y3, children grouped materials based on whether or not they were magnetic. In y4, children explored the definition of conductivity as part of their electricity unit.) Know that some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution (Link to previous learning in y4 where children were taught about states of matter and how materials can change state when heated and cooled.) Use knowledge of solids, liquids and gases to decide how mixtures might be separated, inc. through filtering, sieving and evaporating. (Link to previous learning in y4 where children were taught about states of matter and how materials can change state when heated and cooled.) Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, inc. wood, metals and plastics. (Link to previous learning in y1 where children were taught to identify and name a variety of everyday materials inc wood, plastic, glass, metal, water and rock). Demonstrate that dissolving, mixing and changing of state are reversible changes. (Link to previous learning in y4 where children were taught about states of matter and how materials can change state when heated and cooled.) Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, inc. changes associated with burning and the acid on bicarbonate of soda.
Year 6	

Progression in knowledge— Rocks

*Statements in yellow link to previous learning

*Statements in red are from other linked topics within Science

F1	<ul style="list-style-type: none"> I enjoy exploring natural materials indoors and outdoors. I can explore natural and man-made materials. I can talk about natural and man-made materials using vocabulary linked to my senses.
F2	<ul style="list-style-type: none"> I can talk about what I see outside using wide vocabulary. I can describe what I can see, hear and smell outside. I can describe my own and other environments. I can explore the natural world. <p><u>Early Learning Goal:</u></p> <ul style="list-style-type: none"> Explore the natural world around them making observations Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read.
Year 1	<ul style="list-style-type: none"> Distinguish between an object and the material from which it is made. (Everyday materials) Identify and name a variety of everyday materials inc. wood, plastic, glass, metal, water and rock. (Everyday materials) Describe the simple physical properties of a variety of everyday materials. (Everyday materials) Compare and group together a variety of everyday materials on the basis of their simple physical properties. (Everyday materials)
Year 2	
Year 3	<ul style="list-style-type: none"> Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties Describe in simple terms how fossils are formed when things that have lived are trapped within rock Recognise that soils are made from rocks and organic matter (
Year 4	
Year 5	
Year 6	<ul style="list-style-type: none"> Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth million of years ago (Evolution and inheritance)

Progression in knowledge— Light

*Statements in yellow link to previous learning
 *Statements in red are from other linked topics within Science

F1	<ul style="list-style-type: none"> I can explore natural things going on around me. I am interested in how things work.
F2	<ul style="list-style-type: none"> I can talk about what I can see outside using a wide vocabulary. I can describe what I can see, hear and feel outside. I can explore the natural world. <p>Early Learning Goal:</p> <ul style="list-style-type: none"> Explore the natural world around them making observations. Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read. Understand some important processes and changes in the natural world around them.
Year 1	<ul style="list-style-type: none"> Observe changes across the 4 seasons . (Seasonal changes) Observe and describe weather associated with the seasons and how day length varies. (Seasonal changes)
Year 2	<ul style="list-style-type: none"> Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. (Plants)
Year 3	<ul style="list-style-type: none"> Recognise that they need light in order to see things and that dark is the absence of light. (Do no need to teach the concept that light travels in a straight line as this is taught in year 5) Notice that light is reflected from surfaces. (Do not need to teach the idea that we see objects because they give out or reflect light which then travels to our eyes as this is taught in year 5). Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. Recognise that shadows are formed when the light from a light source is blocked by an opaque object. Find patterns in the way that the size of shadows change. 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)
Year 4	<ul style="list-style-type: none"> 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 (Electricity)
Year 5	<ul style="list-style-type: none"> Recognise that light appears to travel in straight lines. (Previous learning was y3 where they were taught that darkness is the absence of light and that we need light in order to see things.) 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. (Previous learning in y3—noticing that light can be reflected from surfaces) 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. (previous learning in y3—recognising that light is reflected from surfaces) Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. (Previous learning of shadows in year 3 where children are taught how shadows are formed and they find patterns in the way that the size of the shadow change) Compare and group together everyday materials on the basis of their properties inc. their hardness, solubility, transparency, conductivity (electrical and thermal) and response to magnets. (Properties and changes of materials)
Year 6	

Progression in knowledge—Forces

*Statements in yellow link to previous learning

*Statements in red are from other linked topics within Science

F1	<ul style="list-style-type: none"> I enjoy exploring natural materials indoors and outdoors. I can explore natural things going on around me. I am interested in exploring how things work.
F2	<ul style="list-style-type: none"> I can talk about forces I feel e.g push, pull etc. I can talk about the differences in materials. I can explore the natural world. <p><u>Early Learning Goal:</u></p> <ul style="list-style-type: none"> Explore the natural world around them making observations. Understand some important processes and changes in the natural world around them.
Year 1	<ul style="list-style-type: none"> Describe the simple physical properties of a variety of everyday materials .(Everyday materials) Compare and group together a variety of everyday materials on the basis of their simple physical properties . .Everyday materials)
Year 2	
Year 3	<ul style="list-style-type: none"> Compare how things move on different surfaces. (Link to previous learning in F2 and Y1 where they look at different materials and group them based on their properties) Notice that some forces need contact between 2 objects, but magnetic forces can act at a distance. Observe how magnets attract or repel each other and attract some materials and not others. (Previous learning in F2 on push/pull) 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. Describe magnets as having 2 poles, Predict whether 2 magnets will attract or repel each other, depending on which poles are facing.
Year 4	
Year 5	<ul style="list-style-type: none"> Explain that unsupported objects fall towards the Earth because of the force of gravity between the Earth and the falling object. (First time being taught—previous learning on forces was year 3 where they are introduced to friction and they compared how things move on different surfaces) Identify the effects of air resistance, water resistance and friction, that act between moving surfaces. Recognise that some mechanisms, inc. levers, pulleys and gears, allow a smaller force to have a greater effect.
Year 6	

Progression in knowledge— Sound

*Statements in yellow link to previous learning

*Statements in red are from other linked topics within Science

F1	<ul style="list-style-type: none">I can explore natural things going on around me.I am interested in exploring how things work.
F2	<ul style="list-style-type: none">I can describe what I can see, hear and feel outside.I can describe my own and another environment.I can explore the natural world. <p><u>Early Learning Goal:</u></p> <ul style="list-style-type: none">Explore the natural world around them making observations.Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read.
Year 1	<ul style="list-style-type: none">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 inc humans)
Year 2	
Year 3	
Year 4	<ul style="list-style-type: none">Identify how sounds are made, associating some of them with something vibrating.Recognise that vibrations from sounds travel through a medium to the ear.Find patterns between the pitch of a sound and features of the object that produced it.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.
Year 5	
Year 6	

Progression in knowledge— Electricity

*Statements in yellow link to previous learning

*Statements in red are from other linked topics within Science

F1	<ul style="list-style-type: none"> I am interested in exploring how things work.
F2	<ul style="list-style-type: none"> I can explore the natural world. <p><u>Early Learning Goal:</u></p> <ul style="list-style-type: none"> Explore the natural world around them making observations.
Year 1	
Year 2	
Year 3	
Year 4	<ul style="list-style-type: none"> Identify common appliances that run on electricity. Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. (Year 6 create different variations of circuits and compare them in terms of how components function) 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. (Y6 look at how the voltage of a cell can impact the brightness of a bulb or the volume of a buzzer.) Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. Recognise some common conductors and insulators, and associate metals with being good conductors.
Year 5	
Year 6	<ul style="list-style-type: none"> Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in their circuit (Year 4 construct a simple circuit, naming the basic parts. They do not look at the voltage of cells and how this effects the brightness of a lamp or the volume of a buzzer). Compare and give reasons for variations in how components function, inc. the brightness of a bulb, the loudness of buzzers and the on/off position of switches. (Year 4 make simple circuits and look at how an on/off switch opens/closes a circuit and how this effects whether a lamp lights up). Use recognised symbols when representing a simple circuit in a diagram (Not taught previously)

Progression in knowledge— Earth and space

*Statements in yellow link to previous learning
 *Statements in red are from other linked topics within Science

F1	<ul style="list-style-type: none"> • Talk about the features of their own immediate environment& how environments might vary from one another.
F2	<ul style="list-style-type: none"> • I can describe another environment. • I can contrast the natural world around me with different environments. <p><u>Early Learning Goal:</u></p> <ul style="list-style-type: none"> • Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read.
Year 1	<ul style="list-style-type: none"> • Observe changes across the 4 seasons . (Seasonal changes) • Observe and describe weather associated with the seasons and how day length varies. (Seasonal changes)
Year 2	
Year 3	
Year 4	
Year 5	<ul style="list-style-type: none"> • Describe the movement of the Earth, and other planets, relative to the Sun in the solar system • Describe the movement of the Moon relative to the Earth • Describe the Sun, Earth and Moon as approximately spherical bodies • Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky <p>Earth and Space not</p> <p>(Previous learning link—Year 2 look at Neil Armstrong and the Apollo 11 mission to the moon as part of their History and they make moon buggy's in DT.)</p>
Year 6	