



**Barnburgh Primary
Academy**

Progression Document
Science



Barnburgh Primary Academy Vision

Learning To Shine Together

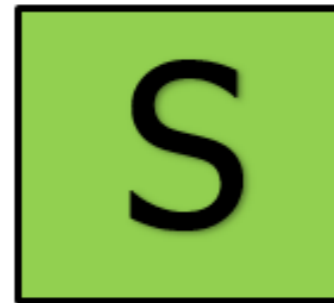
Academy Core Values

Perseverance Courage Independence Respect Ambition

Key Drivers



Ambition
Risk takers,
Goal setters,
Believe in
better,
Courageous



Support
Encouraging,
Sympathetic,
Helpful,
Nurturing and
kind



Persistence
Determined,
Stickability,
Patience,
Stamina



Inspire
Motivate,
Persuade,
Encourage and
Influence



Resilience
Strength of
character,
Adapability,
Bounceback-
ability



Effort
Strive,
Endeavour,
Stretch,
Exertion



PURPOSE OF STUDY

A high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

AIMS

The national curriculum for science aims to ensure that all pupils:

- Develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- Develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- Are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.

EARLY LEARNING GOALS THAT LINK MOST CLOSELY TO THE SCIENCE NATIONAL CURRICULUM

KEY STAGE 1 SUBJECT CONTENT

Key Stage 1 – Year 1 and Year 2

The principal focus of science teaching in key stage 1 is to enable pupils to experience and observe phenomena, looking more closely at the natural and humanly constructed world around them. They should be encouraged to be curious and ask questions about what they notice. They should be helped to develop their understanding of scientific ideas by using different types of scientific enquiry to answer their own questions, including observing changes over a period of time, noticing patterns, grouping and classifying things, carrying out simple comparative tests, and finding things out using secondary sources of information. They should begin to use simple scientific language to talk about what they have found out and communicate their ideas to a range of audiences in a variety of ways. Most of the learning about science should be done through the use of first-hand practical experiences, but there should also be some use of appropriate secondary sources, such as books, photographs and videos.

'Working scientifically' is described separately in the programme of study, but must always be taught through and clearly related to the teaching of substantive science content in the programme of study. Throughout the notes and guidance, examples show how scientific methods and skills might be linked to specific elements of the content. Pupils should read and spell scientific vocabulary at a level consistent with their increasing word-reading and spelling knowledge at key stage

Working scientifically

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

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

KEY STAGE 2 SUBJECT CONTENT

Lower Key Stage 2 – Year 3 and Year 4

The principal focus of science teaching in lower key stage 2 is to enable pupils to broaden their scientific view of the world around them. They should do this through exploring, talking about, testing and developing ideas about everyday phenomena and the relationships between living things and familiar environments, and by beginning to develop their ideas about functions, relationships and interactions. They should ask their own questions about what they observe and make some decisions about which types of scientific enquiry are likely to be the best ways of answering them, including observing changes over time, noticing patterns, grouping and classifying things, carrying out simple comparative and fair tests and finding things out using secondary sources of information. They should draw simple conclusions and use some scientific language, first, to talk about and, later, to write about what they have found out.

‘Working scientifically’ is described separately at the beginning of the programme of study, but must always be taught through and clearly related to substantive science content in the programme of study. Throughout the notes and guidance, examples show how scientific methods and skills might be linked to specific elements of the content. Pupils should read and spell scientific vocabulary correctly and with confidence, using their growing word-reading and spelling knowledge.

Working Scientifically

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

- asking relevant questions and using different types of scientific enquiries to answer them
- setting up simple practical enquiries, comparative and fair tests
- making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- identifying differences, similarities or changes related to simple scientific ideas and processes
- using straightforward scientific evidence to answer questions or to support their findings.

Upper Key Stage 2 – Year 5 and Year 6

The principal focus of science teaching in upper key stage 2 is to enable pupils to develop a deeper understanding of a wide range of scientific ideas. They should do this through exploring and talking about their ideas; asking their own questions about scientific phenomena; and analysing functions, relationships and interactions more systematically. At upper key stage 2, they should encounter more abstract ideas and begin to recognise how these ideas help them to understand and predict how the world operates. They should also begin to recognise that scientific ideas change and develop over time. They should select the most appropriate ways to answer science questions using different types of scientific enquiry, including observing changes over different periods of time, noticing patterns, grouping and classifying things, carrying out comparative and fair tests and finding things out using a wide range of secondary sources of information. Pupils should draw conclusions based on their data and observations, use evidence to justify their ideas, and use their scientific knowledge and understanding to explain their findings.

‘Working and thinking scientifically’ is described separately at the beginning of the programme of study, but must always be taught through and clearly related to substantive science content in the programme of study. Throughout the notes and guidance, examples show how scientific methods and skills might be linked to specific elements of the content. Pupils should read, spell and pronounce scientific vocabulary correctly.

Working Scientifically

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

- planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- using test results to make predictions to set up further comparative and fair tests
- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations
- identifying scientific evidence that has been used to support or refute ideas or arguments



SCIENCE

“The important thing is to never stop questioning.”
Albert Einstein

INTENT

At Barnburgh, we recognise the importance of Science in every aspect of daily life. As one of the core subjects taught in primary curriculum, we give the teaching and learning of Science the prominence it requires.

The Scientific area of learning is concerned with increasing pupils’ knowledge and understanding of our world, and with developing skills associated with Science as a process of enquiry. It will develop the natural curiosity of the child, encourage respect for living organisms and the physical environment and provide opportunities for critical evaluation of evidence.

All children are encouraged to develop and use a range of skills including observations, planning and investigations, as well as being encouraged to question the world around them and become independent learners in exploring possible answers for their scientific based questions. Specialist vocabulary for topics is taught and built up, and effective questioning to communicate ideas is encouraged. Concepts taught should be reinforced by focusing on the key features of scientific enquiry, so that pupils learn to use a variety of approaches to answer relevant scientific questions.

COURAGE

- To have the courage to explore and innovate using Science knowledge and understanding.
- To investigate and be experimental.

PERSEVERANCE

- To develop the ability to stick with something, to continue working, to try harder, to not give up.
- To understand that the perseverance and dedication is needed to work successfully in science.

AMBITION

- To do their best work and then to push themselves beyond what they consider to be their best.
- To develop a desire to achieve something.

RESPECT

- To respect the ambition and work from their peers.
- To respect equipment used in Science.

INDEPENDENCE

- To develop young scientists who understand science plays a crucial role in our world.
- To develop children who are confident young scientists, keen to question further and develop their understanding.

BEYOND THE SUBJECT

We want our Science curriculum to help children to;

- Think creatively and inquisitively in all aspects of their life
- See the world from different perspectives
- Increase their empathy
- Observe and look closer at the world around them
- See scientific connections in the world



IMPLEMENTATION

To ensure high standards of the teaching and learning in science, Barnburgh Primary Academy implement a curriculum that is progressive throughout the setting. Planning for science is a process in which all teachers ensure that the Academy gives full coverage of 'The 2014 National Curriculum' programmes of study, for Science and Understanding of the World in the Early Years Foundation Stage. Wherever possible, Science is linked to class topics. At the start of each topic, teachers take time to find out what our children already understand and want to find out. Our teachers use this to adapt and extend the curriculum to match children's interests and needs, current events, the use of any support staff and the resources available. We include the use of technology, wherever appropriate, to aid teaching and learning. Through teacher modelling and planned questioning, we want our children to wonder about and be amazed and surprised by the world around them, as we know every child has different experiences. Key scientific language is modelled throughout lessons enabling our children to be familiar with and use vocabulary accurately.

Teachers are also encouraged to plan in trips and visitors to enhance our children's learning experience.

At Barnburgh Primary Academy we strive to promote children's independence and for all children to take responsibility in their own learning. Each of our young scientists has their own Science book, where their learning is recorded in a variety of forms.

IMPACT

The successful approach at Barnburgh Primary results in a fun, engaging, high-quality Science education, that provides children with the foundations for understanding the world. Our engagement with the local environment ensures that our young scientists learn through varied and first-hand experiences of the world around them. So much of Science lends itself to outdoor learning and so we provide children with opportunities to experience this. Through various workshops, trips and interactions with experts and local charities, children have the understanding that Science has changed our lives and that it is vital to the world's future prosperity. Children learn the possibilities for careers in Science, as a result of our connection with national agencies such as the STEM association. Pupil voice is used to further develop the Science curriculum, through questioning of pupil's views and attitudes to Science to support the children's enjoyment of science and to motivate learners. Examples of our Scientists' work can be seen in our classrooms.

Long Term Plan 2023-2024

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
YEAR 1	<p style="text-align: center;">Working scientifically</p> <p>asking simple questions and recognising that they can be answered in different ways observing closely, using simple equipment performing simple tests identifying and classifying using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions</p> <p style="text-align: center;">Plants</p> <p>identify and name a variety of common wild and garden plants, including deciduous and evergreen trees identify and describe the basic structure of a variety of common flowering plants, including trees 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</p>	<p style="text-align: center;">Working scientifically</p> <p>asking simple questions and recognising that they can be answered in different ways observing closely, using simple equipment performing simple tests identifying and classifying using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions</p> <p style="text-align: center;">Seasonal changes</p> <p>observe changes across the 4 seasons observe and describe weather associated with the seasons and how day length varies</p>		<p style="text-align: center;">Working scientifically</p> <p>asking simple questions and recognising that they can be answered in different ways observing closely, using simple equipment performing simple tests identifying and classifying using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions</p> <p style="text-align: center;">Everyday materials</p> <p>distinguish between an object and the material from which it is made 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 compare and group together a variety of everyday materials on the basis of their simple physical properties identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching</p>	<p style="text-align: center;">Working scientifically</p> <p>Asking simple questions and recognising that they can be answered in different ways Observing closely, using simple equipment Performing simple tests Identifying and classifying using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions</p> <p style="text-align: center;">Animals including humans</p> <p>identify and name a variety of common animals including 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 including 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, including humans, have offspring which grow into adults find out about and describe the basic needs of animals, including humans, for survival (water, food and air) describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene</p>	
CROSS CURRICULAR LINKS						
ENRICHMENT						



<p>YEAR 2</p>	<p>Working scientifically asking simple questions and recognising that they can be answered in different ways observing closely, using simple equipment performing simple tests identifying and classifying using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions</p> <p>Animals including humans notice that animals, including humans, have offspring which grow into adults find out about and describe the basic needs of animals, including humans, for survival (water, food and air) describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p>	<p>Working scientifically asking simple questions and recognising that they can be answered in different ways observing closely, using simple equipment performing simple tests identifying and classifying using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions</p> <p>Plants 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.</p>	<p>Working scientifically asking simple questions and recognising that they can be answered in different ways observing closely, using simple equipment performing simple tests identifying and classifying using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions</p> <p>Use of everyday materials identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p>			<p>Working scientifically asking simple questions and recognising that they can be answered in different ways observing closely, using simple equipment performing simple tests identifying and classifying using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions</p> <p>Use of everyday materials 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 identify and name a variety of plants and animals in their habitats, including microhabitats 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.</p>
<p>CROSS CURRICULAR LINKS</p>						
<p>ENRICHMENT</p>						

YEAR 3

Working scientifically
 asking relevant questions and using different types of scientific enquiries to answer them
 setting up simple practical enquiries, comparative and fair tests
 making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
 gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
 recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
 reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
 using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
 identifying differences, similarities or changes related to simple scientific ideas and processes
 using straightforward scientific evidence to answer questions or to support their findings.

Forces and magnets
 compare how things move on different surfaces
 notice that some forces need contact between two objects, but magnetic forces can act at a distance
 observe how magnets attract or repel each other and attract some materials and not others
 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 two poles
 predict whether two magnets will attract or repel each other, depending on which poles are facing.

Working scientifically
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 using straightforward scientific evidence to answer questions or to support their findings.

Plants
 identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers
 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
 investigate the way in which water is transported within plants
 explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.

Working scientifically
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Light
 recognise that they need light in order to see things and that dark is the absence of light
 notice that light is reflected from surfaces
 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.

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 using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
 identifying differences, similarities or changes related to simple scientific ideas and processes
 using straightforward scientific evidence to answer questions or to support their findings.

Animals including humans
 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
 identify that humans and some other animals have skeletons and muscles for support, protection and movement.

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

Rocks
 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.

Working scientifically
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 identifying differences, similarities or changes related to simple scientific ideas and processes
 using straightforward scientific evidence to answer questions or to support their findings.

Forces and magnets
 compare how things move on different surfaces
 notice that some forces need contact between two objects, but magnetic forces can act at a distance
 observe how magnets attract or repel each other and attract some materials and not others
 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 two poles
 predict whether two magnets will attract or repel each other, depending on which poles are facing.

CROSS CURRICULAR LINKS

ENRICHMENT

YEAR 4

Working scientifically
 asking relevant questions and using different types of scientific enquiries to answer them
 setting up simple practical enquiries, comparative and fair tests
 making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
 gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
 recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
 reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
 using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
 identifying differences, similarities or changes related to simple scientific ideas and processes
 using straightforward scientific evidence to answer questions or to support their findings.

Electricity
 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
 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
 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.

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 identifying differences, similarities or changes related to simple scientific ideas and processes
 using straightforward scientific evidence to answer questions or to support their findings.

Sound
 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.

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States of matter
 compare and group materials together, according to whether they are solids, liquids or gases
 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)
 identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.

Working scientifically
 asking relevant questions and using different types of scientific enquiries to answer them
 setting up simple practical enquiries, comparative and fair tests
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 gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
 recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
 reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
 using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
 identifying differences, similarities or changes related to simple scientific ideas and processes
 using straightforward scientific evidence to answer questions or to support their findings.

Animals including humans
 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.

Working scientifically
 asking relevant questions and using different types of scientific enquiries to answer them
 setting up simple practical enquiries, comparative and fair tests
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Living things and their habitats
 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.

CROSS CURRICULAR LINKS

ENRICHMENT



YEAR 5	<p>Working scientifically planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs using test results to make predictions to set up further comparative and fair tests reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments</p> <p>Earth and Space 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>	<p>Working scientifically planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs using test results to make predictions to set up further comparative and fair tests reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments</p> <p>Properties and changes of material 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 know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic demonstrate that dissolving, mixing and changes of state are reversible changes explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.</p>	<p>Working scientifically planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs using test results to make predictions to set up further comparative and fair tests reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments</p> <p>Living things and their habitats describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird describe the life process of reproduction in some plants and animals</p>	<p>Working scientifically planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs using test results to make predictions to set up further comparative and fair tests reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments</p> <p>Animals including humans describe the changes as humans develop to old age.</p>	<p>Working scientifically planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs using test results to make predictions to set up further comparative and fair tests reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments</p> <p>Forces explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object identify the effects of air resistance, water resistance and friction, that act between moving surfaces recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</p>
	CROSS CURRICULAR LINKS ENRICHMENT				

YEAR 6

Working scientifically
 planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs using test results to make predictions to set up further comparative and fair tests reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments

Evolution and Inheritance
 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.

Working scientifically
 planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs using test results to make predictions to set up further comparative and fair tests reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments

Light
 recognise that light appears to travel in straight lines 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 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 use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.

Working scientifically
 planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs using test results to make predictions to set up further comparative and fair tests reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments

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, including microorganisms, plants and animals give reasons for classifying plants and animals based on specific characteristics.

Working scientifically
 planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs using test results to make predictions to set up further comparative and fair tests reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments

Animals including humans
 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, including humans.

Working scientifically
 planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs using test results to make predictions to set up further comparative and fair tests reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments

Electricity
 associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit 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 use recognised symbols when representing a simple circuit in a diagram.

CROSS CURRICULAR LINKS ENRICHMENT

WORKING SCIENTIFICALLY

STAGE	EYFS	KS1 Science National Curriculum		KS2 Science National Curriculum		KS2 Science National Curriculum	
		<i>asking simple questions and recognising that they can be answered in different ways</i> <i>observing closely, using simple equipment</i> <i>performing simple tests</i> <i>identifying and classifying</i> <i>using their observations and ideas to suggest answers to questions</i> <i>gathering and recording data to help in answering questions</i>		<i>asking relevant questions and using different types of scientific enquiries to answer them</i> <i>setting up simple practical enquiries, comparative and fair tests</i> <i>making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</i> <i>gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</i> <i>recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</i> <i>reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</i> <i>using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</i> <i>identifying differences, similarities or changes related to simple scientific ideas and processes</i> <i>using straightforward scientific evidence to answer questions or to support their findings.</i>		<i>planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</i> <i>taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</i> <i>recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</i> <i>using test results to make predictions to set up further comparative and fair tests</i> <i>reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations</i> <i>identifying scientific evidence that has been used to support or refute ideas or arguments</i>	
KNOWLEDGE	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
	Children will know:	Children will know:	Children will know:	Children will know:	Children will know:	Children will know:	Children will know:
	<ul style="list-style-type: none"> That asking simple questions is important when investigating That they can answer a question by using the words yes and no That making relevant observations using simple equipment is important That they can conduct simple tests That they can identify and classify different animals, objects and materials That they can gather and record data That they can recognize different findings That they can use their observations and ideas to suggest answers to simple questions 	<ul style="list-style-type: none"> That asking simple questions is important That questions can be answered in different ways That they can use close observation, using simple equipment That they can perform simple tests That they can identify and classify different animals, objects and materials That there are a series of different ways to record and communicate findings That they can use simple scientific language That they can gather and record data to help answer questions That using observations and ideas will help to suggest answers to simple questions 	<ul style="list-style-type: none"> That they can ask simple questions That questions can be answered in different ways That they can use close observation, using simple equipment That they can perform simple tests That they can identify and classify different animals, objects and materials That there are a series of different ways to record and communicate findings That they can use simple scientific language That they can gather and record data to help answer questions That using observations and ideas will help to suggest answers to simple questions 	<ul style="list-style-type: none"> That asking relevant questions is important That there are a variety of different types of scientific enquiry to answer questions That they can set up simple and practical enquiries, comparative and fair tests, with some support That they can make systematic and careful observations, using simple equipment That they can use standard units when taking measurements That gathering, recording, classifying and presenting data in a variety of ways will help to answer questions That they can use various ways of recording, grouping and displaying evidence and suggest how findings may be tabulated with support That it is important to suggest conclusions from enquiries, with support That findings could be reported That they can suggest possible improvements or further questions when investigating 	<ul style="list-style-type: none"> That asking relevant questions is important That there are a variety of different types of scientific enquiry to answer questions That they can set up simple and practical enquiries, comparative and fair tests That they can make systematic and careful observations, using simple equipment, including thermometers and data loggers That they can take accurate measurements using standard units, where appropriate That they can gather, record, classify and present data in a variety of ways to help to answer questions That they can record findings using simple scientific language, drawings and labelled diagrams That they can record findings using keys, bar charts, and tables That they can report on findings from enquiries, including oral and written explanations, of results and conclusions That they can report on findings from enquiries using displays or presentations That they can identify differences, similarities or changes related to simple scientific ideas and processes That using straightforward scientific evidence to answer questions or to support their findings is important when investigating That they can use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions 	<ul style="list-style-type: none"> That planning different types of scientific enquiries will help to answer questions That recognising and controlling variables is necessary That it is crucial to use appropriate equipment to take accurate readings, with support That they can take precise measurements using standard units That there is need for repeat readings That it is important to take and process repeat readings That recording data and creating results will develop accuracy That they should record data using labelled diagrams, keys, tables and charts That they can use line graphs to record data That it is important to report and present findings from enquiries, including conclusions That they can suggest causal relationships within data That they can present findings from enquiries orally and in writing (with support) 	<ul style="list-style-type: none"> That planning different types of scientific enquiries will help to answer questions That recognising and controlling variables is necessary That using a range of scientific equipment will help to take measurements That taking measurements with increasing accuracy and precision will help create valid results That they can repeat readings when appropriate That they can record data and results (of increasing complexity) using scientific diagrams and labels, classification keys, tables, bar charts and line graphs That they can report and present findings from enquiries, including conclusions and causal relationships That they can report and presents findings from enquiries in oral and written forms such as displays and other presentation That they can report and present findings from enquiries, including explanations of, and degree of, trust in results That they can identify scientific evidence that has been conducted to support or refute ideas or arguments That test results can be used to make predictions to set up further comparative and fair tests

	<p>Children will be able to:</p> <ul style="list-style-type: none"> • Ask simple questions with support • Answer a question with support • Make relevant observations using simple equipment • Conduct simple tests, with support • Identify and classify with support • Gather and record data • Recognise findings • Use their observations and ideas to suggest answers to simple questions 	<p>Children will be able to:</p> <ul style="list-style-type: none"> • Ask simple questions • Recognise that questions can be answered in different ways • Observe closely, using simple equipment • Perform simple tests • Identify and classify • Record and communicate findings in a range of ways • Use simple scientific language with support • Gather and record data to help answer questions • Use their observations and ideas to suggest answers to simple questions 	<p>Children will be able to:</p> <ul style="list-style-type: none"> • Ask relevant questions with support • Use different types of scientific enquiry to answer them • Set up simple and practical enquiries, comparative and fair tests with some support • Make systematic and careful observations, using simple equipment • Use standard units when taking measurements • Gather, record, classify and present data in a variety of ways to help to answer questions with support • Use various ways of recording, grouping and displaying evidence and suggest how findings may be tabulated with support • Suggest conclusions from enquiries with support • Explain how findings could be reported • Suggest possible improvements or further questions to investigate 	<p>Children will be able to:</p> <ul style="list-style-type: none"> • Ask relevant questions • Use different types of scientific enquiries to answer their questions • Set up simple and practical enquiries, comparative and fair tests • Make systematic and careful observations, using a range of equipment, including thermometers and data loggers • Take accurate measurements using standard units, where appropriate • Gather, record, classify and present data in a variety of ways to help to answer questions • Record findings using simple scientific language, drawings and labelled diagrams • Record findings using keys, bar charts, and tables • Report on findings from enquiries, including oral and written explanations, of results and conclusions • Report on findings from enquiries using displays or presentations • Identify differences, similarities or changes related to simple scientific ideas and processes • Use straightforward scientific evidence to answer questions or to support their findings • Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions 	<p>Children will be able to:</p> <ul style="list-style-type: none"> • Plan different types of scientific enquiries to answer questions • Recognise and control variables where necessary with support • Use appropriate equipment to take readings with support • Take precise measurements using standard units • Explain why there is need for repeat readings • Take and process repeat readings • Record data and results • Record data using labelled diagrams, keys, tables and charts • Use line graphs to record data • Report and present findings from enquiries, including conclusions • Suggest causal relationships within data • Present findings from enquiries orally and in writing, with support 	<p>Children will be able to:</p> <ul style="list-style-type: none"> • Plan different types of scientific enquiries to answer questions • Recognise and control variables where necessary • Use a range of scientific equipment to take measurements • Take measurements with increasing accuracy and precision • Take repeat readings when appropriate • Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar charts and line graphs • Report and present findings from enquiries, including conclusions and causal relationships • Report and presents findings from enquiries in oral and written forms such as displays and other presentation • Report and present findings from enquiries, including explanations of, and degree of, trust in results • Identify scientific evidence that has been used to support or refute ideas or arguments • Use test results to make predictions to set up further comparative and fair tests
VOCABULARY						
	<p>Question Conduct Test Observation Data</p>	<p>Question Conduct Test Observation Data Classify Identify</p>	<p>Systematic Enquiry Conclusion Standard units Classify Identify</p>	<p>Prediction Evidence Systematic Enquiry Classify Conclusion</p>	<p>Orally Variables Accuracy Process</p>	<p>Orally Variables Accuracy Process Complexity</p>

ANIMALS INCLUDING HUMANS

		KS1 Science National Curriculum <i>identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</i> <i>identify and name a variety of common animals that are carnivores, herbivores and omnivores</i> <i>describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets)</i> <i>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> <i>notice that animals, including humans, have offspring which grow into adults</i> <i>find out about and describe the basic needs of animals, including humans, for survival (water, food and air)</i> <i>describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene</i>		KS2 Science National Curriculum <i>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> <i>identify that humans and some other animals have skeletons and muscles for support, protection and movement</i> <i>describe the simple functions of the basic parts of the digestive system in humans</i> <i>identify the different types of teeth in humans and their simple functions</i> <i>construct and interpret a variety of food chains, identifying producers, predators and prey</i>		KS2 Science National Curriculum <i>describe the changes as humans develop to old age</i> <i>identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood</i> <i>recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function</i> <i>describe the ways in which nutrients and water are transported within animals, including humans</i>		
		EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
KNOWLEDGE			<p>Children will know:</p> <ul style="list-style-type: none"> That there are a variety of common animals including fish, amphibians, reptiles, birds and mammals That there are a variety of common animals that are carnivores, which include lions, crocodiles and snakes That there are a variety of common animals that are herbivores, which include cows, rabbits and sheep. That they are a variety of common animals that are omnivores, including pig, bear and sloth. That there are different structures of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) Considering gills, vertebrates, invertebrates, eyes That they can compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). Considering gills, vertebrates, invertebrates, eyes That the human body consists of a brain, heart, skeleton, lungs, liver and kidneys. Whilst also labelling which parts of the body is associated with each sense, such as eyes, nose, ears, mouth and hands. 	<p>Children will know:</p> <ul style="list-style-type: none"> That animal, including humans, have offspring which grow into adults That the basic needs of animals, including humans, for survival are water, food and air. That it is important for humans to exercise, eating the right amounts of different types of food, and hygiene 	<p>Children will know:</p> <ul style="list-style-type: none"> 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 That humans and some other animals have skeletons and muscles for support, protection and movement 	<p>Children will know:</p> <ul style="list-style-type: none"> That the simple functions of the basic parts of the digestive system in humans include, the Mouth, Oesophagus, Stomach, Intestines and Anus. That there are different types of teeth in humans which include incisor, canine and molars That incisors help you bite off and chew pieces of food. That canines are used for tearing and ripping food. That molars help you crush and grind food. Our teeth will change with age. So, the teeth you have when you are a baby aren't the same as the one's you will have as an adult. That there are a variety of food chains, which include producers, predators and prey. A food chain is a sequence describing how different animals eat each other, showing the order in which living things depend on each other for food A food chain always starts with a producer. A producer is something that makes its own food like green plants as they use photosynthesis. The living things that eat producers and other animals are called consumers. A predator is an animal that eats other animals. The animals that are eaten are called prey. That they can interpret a variety of food chains by identifying different producers, predators and prey. 	<p>Children will know:</p> <ul style="list-style-type: none"> That changes happen as humans develop to old age. Such as skin wrinkling, change of hair colour and bones become more fragile. That physical and emotional changes occur during puberty. Which can include, body hair, deepening voice (Boys), periods and breast development (Girls). That there are several functions of the male reproductive system (production of testosterone and to transport sperm to the female's reproductive system) and the female reproductive system (production of eggs and develop a fetus ready for delivery). 	<p>Children will know:</p> <ul style="list-style-type: none"> That the main parts of the human circulatory system are the heart, blood vessels, blood, veins and arteries. That the main functions of the heart, blood vessels and blood is to supply tissues in the body with nutrients and oxygen. That the diet, exercise, drugs and lifestyle can have positive or negative impacts on the way their body's function. That nutrients and water are transported throughout the circulatory system within most animals, including humans.

SKILLS

Children will be able:	Children will be able:	Children will be able:	Children will be able:	Children will be able:	Children will be able:
<ul style="list-style-type: none"> To identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals To identify and name a variety of common animals that are carnivores To identify and name a variety of common animals that are herbivores To identify and name a variety of common animals that are omnivores To describe the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) To compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) To identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense 	<ul style="list-style-type: none"> To understand that animals, including humans, have offspring which grow into adults To describe the basic needs of animals, including humans, for survival (water, food and air) To describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene 	<ul style="list-style-type: none"> To 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 To identify that humans and some other animals have skeletons and muscles for support, protection and movement 	<ul style="list-style-type: none"> To describe the simple functions of the basic parts of the digestive system in humans To identify the different types of teeth in humans To identify the simple functions of the types of teeth To construct a variety of food chains, identifying producers, predators and prey. To interpret a variety of food chains, identifying producers, predators and prey. 	<ul style="list-style-type: none"> To describe the changes as humans develop to old age. To identify the physical and emotional changes during puberty. To name and describe the functions of the male and female reproductive system. 	<ul style="list-style-type: none"> To identify and name the main parts of the human circulatory system To describe the functions of the heart, blood vessels and blood. To recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. To describe the ways in which nutrients and water are transported within animals, including humans.

VOCABULARY

Amphibians Reptiles Mammals Carnivore Herbivore Omnivore Label Senses	Hygiene Diet Offspring	Protection Movement Nutrition Skeleton	Digestion Mouth Oesophagus Stomach Intestines Anus. Incisors Canines Molars Prey Predators	Puberty Fertility Period Reproduction Fragile Sperm Ovulation	Circulatory Veins Artery Nutrients Vessels
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LIVING THINGS AND THEIR HABITATS

	<p>KS1 Science National Curriculum <i>explore and compare the differences between things that are living, dead, and things that have never been alive</i> <i>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> <i>identify and name a variety of plants and animals in their habitats, including microhabitats</i> <i>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></p>		<p>KS2 Science National Curriculum <i>recognise that living things can be grouped in a variety of ways</i> <i>explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment</i> <i>recognise that environments can change and that this can sometimes pose dangers to living things</i></p>		<p>KS2 Science National Curriculum <i>describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird</i> <i>describe the life process of reproduction in some plants and animals</i> <i>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</i> <i>give reasons for classifying plants and animals based on specific characteristics</i></p>		
	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
KNOWLEDGE			<p>Children will know:</p> <ul style="list-style-type: none"> • That there are differences between things that are living, dead, and things that have never been alive. Study; animals, plants and stationary (such as crayons). • That the characteristics of living are MRS GREN • That MRS GREN is an acronym often used to help remember all the necessary features of living organisms: Movement, Respiration, Sensitivity, Growth, Reproduction, Excretion and Nutrition. • That most living things live in habitats to which they are suited for example lizards in warm environments and Penguins in the cold etc. • That different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other. • That several plants and animals can be identified within their individual habitats, including micro-habitats. • That animals obtain their food from plants and other animals, using the idea of a simple food chain. Highlighting a source, producers, predators and prey. • That a producer is something that makes its own food. The living things that eat producers and other animals are called consumers. A predator is an animal that eats other animals. The animals that are eaten are called prey. 		<p>Children will know:</p> <ul style="list-style-type: none"> • That living things can be grouped in a variety of ways including mammals, fish, amphibians, birds, insects, reptiles and insects. • That using classification keys can help group, identify and name a variety of living things in their local and wider environment. • That environments can change in a variety of different ways and that this can sometimes pose dangers to living things. For example, a drought drying up rivers causes fish to die. 	<p>Children will know:</p> <ul style="list-style-type: none"> • That the life cycle of a mammal begins with an embryo, then a young mammal, before reaching adulthood. • That life cycles of an amphibian starts with an egg mass, hatching, tadpole/larvae, juvenile tadpole and then an adult amphibian. • That the life cycles of an insect begins with an egg and then develops into a larva, then a pupa then metamorphosis takes place before turning into an adult. • That life cycles of a bird starts with an egg, then develops to a chick, a young bird then an adult bird. 	<p>Children will know:</p> <ul style="list-style-type: none"> • That living things are classified into broad groups according to common observable characteristics and based on similarities and differences, such as the amount of legs, mammal or not, gills etc. This includes micro-organisms, plants and animals. • That the reasons for classifying plants and animals based on specific characteristics is to see how different organisms are related to each other, to understand how to take care of different plants and animals, to organise knowledge about lots of different species and to make guesses about new species that may be discovered

SKILLS

Children will be able:

- To explore the differences between things that are living, dead, and things that have never been alive.
- To compare the differences between things that are living, dead, and things that have never been alive.
- To 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.
- To identify and name a variety of plants and animals in their habitats, including micro- habitats.
- To 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

Children will be able:

- To recognise that living things can be grouped in a variety of ways
- To use classification keys to help group, identify and name a variety of living things in their local and wider environment.
- To recognise that environments can change and that this can sometimes pose dangers to living things.

Children will be able:

- To describe the differences in the life cycles of a mammal.
- To describe the differences in the life cycles of an amphibian.
- To describe the differences in the life cycles of an insect.
- To describe the differences in the life cycles of a bird.
- To describe the life process of reproduction in some plants and animals.

Children will be able:

- To 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.
- To give reasons for classifying plants and animals based on specific characteristics.

VOCABULARY

Living
Respiration
Dead
Habitats
Source

Classification
Mammals
Amphibians
Reptiles
Birds
insects
Habitat

Embryo
Larvae
Reproduction
Metamorphosis

Micro- organisms
Classification
Organisms
Species



PLANTS

		KS1 Science National Curriculum <i>identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</i> <i>identify and describe the basic structure of a variety of common flowering plants, including trees</i> <i>observe and describe how seeds and bulbs grow into mature plants</i> <i>find out and describe how plants need water, light and a suitable temperature to grow and stay healthy</i>		KS2 Science National Curriculum <i>identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers</i> <i>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> <i>investigate the way in which water is transported within plants</i> <i>explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal</i>		KS2 Science National Curriculum	
EYFS		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
KNOWLEDGE		Children will know: <ul style="list-style-type: none"> • That a variety of common wild and garden plants include holly, yew, oak and larch. • That evergreen trees keep their leaves all year round and deciduous trees lose them. • That branches are grow from the trunk of the tree and help the transport water, sugar and nutrients to the leaves and canopy (crown) of the tree. • That a trunk is the main woody stem of a tree as distinct from its branches and roots. • That fruit can be grown on trees • That a stem holds up the plant and carries water to the leaves. • That leaves are attached to a stem or branch and can come in many shapes and sizes. One of their main jobs is to help the plant to collect sunlight; plants need sunlight in order to make their food or energy • That a flower is the bloom or blossom of a plant. The flower is the part of a plant that produces seeds, which in time become other flowers • That roots of a plant take up water and nutrients from the soil. They also anchor the plant to the ground and keep it steady. 	Children will know: <ul style="list-style-type: none"> • That seeds and bulbs grow into mature plants when the seed cracks open and starts to grow when it has the right amount of water warmth and nutrients in the soil. • That plants need water, light and a suitable temperature to grow and stay healthy. 	Children will know: <ul style="list-style-type: none"> • That there are a number of parts of flowering plants • That roots absorb water and nutrients from the soil. • That the stem/trunk transports water and nutrients up from the roots all the way to the leaves • That leaves change sunlight into energy through photosynthesis. The leaves are the primary food-making part of the plant. • That the primary purpose of the flower is reproduction • That plants need a variety factors to begin life and continue growth. This includes the right amount of air, light, water, nutrients from soil, and room to grow. • That water is transported within plants by transpiration. • That the flower allows the plant to reproduce via pollination (an insect goes into the flower to drink the nectar, some grains of pollen brush off the anthers onto their body), seed formation within the plant and seed dispersal (seeds spread away from each other and from their parent plant, by wind, insects, explosion and water). 			
		Children will be able: <ul style="list-style-type: none"> • To identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. • To identify and describe the basic structure of a variety of common flowering plants, including trees. 	Children will be able: <ul style="list-style-type: none"> • To observe and describe how seeds and bulbs grow into mature plants • To research and describe how plants need water, light and a suitable temperature to grow and stay healthy 	Children will be able: <ul style="list-style-type: none"> • To identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. • To 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. • To investigate the way in which water is transported within plants • To explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. 			
SKILLS							
		Evergreen Deciduous Branches Trunk Fruit Stem Leaves Flower Roots.	Temperature Mature plants Observe	Seed dispersal Explosion Transpiration Pollination Nutrients Evaporation Photosynthesis Absorb			
VOCABULARY							



SEASONAL CHANGES

		KS1 Science National Curriculum <i>observe changes across the 4 seasons observe and describe weather associated with the seasons and how day length varies</i>	KS2 Science National Curriculum			KS2 Science National Curriculum	
		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
SKILLS	EYFS	Children will know: <ul style="list-style-type: none"> • That the four seasons are Spring, Summer, Autumn and Winter. • That winter is recognized as the colder season • That summer is hotter in temperature • That in summer and autumn the days are longer (have more sunlight) • That in spring and winter the days are shorter (have less sunlight) 					
		Children will be able: <ul style="list-style-type: none"> • To observe changes across the four seasons. • To observe and describe weather associated with the seasons and how day length varies. 					
VOCABULARY							
		Spring Summer Autumn Winter Light Observe					

MATERIALS

KS1 Science National Curriculum
distinguish between an object and the material from which it is made
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
compare and group together a variety of everyday materials on the basis of their simple physical properties
identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching

KS2 Science National Curriculum
compare and group materials together, according to whether they are solids, liquids or gases
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)
identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature

KS2 Science National Curriculum
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
know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution
use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating
give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic
demonstrate that dissolving, mixing and changes of state are reversible changes
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

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
KNOWLEDGE		<p>Children will know:</p> <ul style="list-style-type: none"> That an object and the material which it is made from are different. Such as a chair and wood. That we use certain materials on a daily basis including wood, plastic, glass, metal, water, and rock. That properties of materials can be described using words such as soft, hard, light, heavy bendy, stiff, warm and cold. That everyday materials can be grouped on the basis of their simple physical properties. 	<p>Children will know:</p> <ul style="list-style-type: none"> That different everyday materials are suitable for different purposes including wood, metal, plastic, glass, brick, rock, paper and cardboard. That the shapes of solid objects made from materials, such as clay and rubber can be changed by squashing, bending, twisting and stretching. 		<p>Children will know:</p> <ul style="list-style-type: none"> That materials can be grouped according to whether they are solids, liquids or gases. That solids have a definite shape and volume. That liquids have a definite volume, but take the shape of the container. That gases have no definite shape or volume. That some materials change state when they are heated or cooled, such as wax or chocolate and the melting/solidifying temperature can be measured using degrees Celsius (°C). That evaporation is the process of changing liquid water into gas when it is heated within the water cycle. That condensation is the process where water vapor cools to form clouds. 	<p>Children will know:</p> <ul style="list-style-type: none"> That everyday materials can be grouped on the basis of their properties, solubility, transparency, conductivity (electrical and thermal), and response to magnets. That some materials, such as salt will dissolve in a liquid to form a solution and that this process can be reversed. That filtering, sieving and evaporating can be used to separate mixtures. That a mixture made of solid particles of different sizes, for example sand and gravel, can be separated by sieving. That you can separate a mixture of sand and water by passing it through a piece of filter paper. The water is able to pass through the tiny gaps in the paper but the sand particles are too big and are left on the surface of the filter paper. That by dissolving salt in water you make a solution. You can separate the salt from the water again by boiling the solution. The water will evaporate until it is all gone. The salt will be left behind. That fair tests can produce evidence to support why we use particular everyday materials, including metals, wood and plastic. <ul style="list-style-type: none"> That dissolving, mixing and changing of state are reversible changes That some changes result in the formation of new materials, and that this kind of change is not usually reversible, including burning and the action of acid on bicarbonate of soda. 	

SKILLS

Children will be able:

- To distinguish between an object and the material from which it is made.
- To identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.
- To describe the simple physical properties of a variety of everyday materials.
- To compare and group together a variety of everyday materials on the basis of their simple physical properties.

Children will be able:

- To identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
- To research how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

Children will be able:

- To compare and group materials together, according to whether they are solids, liquids or gases.
- To 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).
- To identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature

Children will be able:

- To 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.
- To identify that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution
- To use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.
- To give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.
- To investigate that dissolving, mixing and changes of state are reversible changes
- To 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

VOCABULARY

Material
Compare
Soft
Hard
Light
Heavy
Bendy
Stiff
Warm
Cold

Suitability
Compare
Materials
Bend
Twist
Squashing

Reversible
Bicarbonate soda
Dissolving
Mixing
Fair test
Thermal
Electrical
Evaporating



ROCKS							
	KS1 Science National Curriculum		KS2 Science National Curriculum <i>compare and group together different kinds of rocks on the basis of their appearance and simple physical properties</i> <i>describe in simple terms how fossils are formed when things that have lived are trapped within rock</i> <i>recognise that soils are made from rocks and organic matter</i>		KS2 Science National Curriculum		
	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
KNOWLEDGE				Children will know: <ul style="list-style-type: none"> • That igneous rocks are formed from melted rock deep inside the Earth. • That sedimentary rocks are formed from layers of sand, silt, dead plants, and animal skeletons. • That metamorphic rocks formed from other rocks that are changed by heat and pressure underground. • That fossils are formed when things that have lived are trapped within rock over millions of years. • That soils are made from rocks and other organic matter. 			
SKILLS				Children will be able: <ul style="list-style-type: none"> • To compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. • To describe in simple terms how fossils are formed when things that have lived are trapped within rock. • To identify that soils are made from rocks and organic matter. 			
VOCABULARY							
				Sedimentary Metamorphic Igneous Fossil Physical properties			



LIGHT

LIGHT							
	KS1 Science National Curriculum	KS2 Science National Curriculum			KS2 Science National Curriculum		
			<i>recognise that they need light in order to see things and that dark is the absence of light</i> <i>notice that light is reflected from surfaces</i> <i>recognise that light from the sun can be dangerous and that there are ways to protect their eyes</i> <i>recognise that shadows are formed when the light from a light source is blocked by an opaque object</i> <i>find patterns in the way that the size of shadows change</i>		<i>recognise that light appears to travel in straight lines</i> <i>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> <i>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> <i>use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them</i>		
	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
KNOWLEDGE				Children will know: <ul style="list-style-type: none"> That light is needed in order to see things and that darkness is the absence of light. That light is reflected from surfaces. That light from the sun can be dangerous and that there are ways to protect their eyes, such as the use of sunglasses. That shadows are formed when the light from a light source is blocked by a solid object. That the size of shadows can change when more light is blocked by an object. 			Children will know: <ul style="list-style-type: none"> That light appears to travel in straight lines That when light hits an object, it is reflected by that object and travels in straight lines to our eyes. Our eyes take in some of this light and information is sent to the brain. This is how we see the object.
SKILLS				Children will be able: <ul style="list-style-type: none"> To identify that they need light in order to see things and that dark is the absence of light. To identify that light is reflected from surfaces. To understand that light from the sun can be dangerous and that there are ways to protect their eyes. To understand that shadows are formed when the light from a light source is blocked by a solid object. To find patterns in the way that the size of shadows change 			Children will be able: <ul style="list-style-type: none"> To explain that light appears to travel in straight lines To explain how we see objects To explain that because light travels in straight lines shadows have the same shape as the objects that cast them.
VOCABULARY							
				Light Shadow Solid Reflected Absence			Transparent Opaque Reflection Light source

SOUND						
	KS1 Science National Curriculum	KS2 Science National Curriculum			KS2 Science National Curriculum	
	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
KNOWLEDGE					Children will know: <ul style="list-style-type: none"> • That sounds are made when something is vibrating the air. • That vibrations from sounds travel through a medium to the ear. • That there are patterns between the pitch of a sound and features of the object that produced it. • That there are patterns between the volume of a sound and the strength of the vibrations that produced it. • That sounds get fainter as the distance from the sound source increases. 	
SKILLS					Children will be able: <ul style="list-style-type: none"> • To identify how sounds are made, associating some of them with something vibrating. • To identify that vibrations from sounds travel through a medium to the ear. • To find patterns between the pitch of a sound and features of the object that produced it. • To find patterns between the volume of a sound and the strength of the vibrations that produced it. • To identify that sounds get fainter as the distance from the sound source increases. 	
VOCABULARY						
					Vibrations Medium Pitch Volume Produced	

FORCES AND MAGNETS							
	KS1 Science National Curriculum	KS2 Science National Curriculum <i>compare how things move on different surfaces 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 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</i>			KS2 Science National Curriculum <i>explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object identify the effects of air resistance, water resistance and friction, that act between moving surfaces recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect</i>		
	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	
KNOWLEDGE				Children will know: <ul style="list-style-type: none"> • That they can compare how different objects move on different surfaces • That some forces need contact between two objects, but magnetic forces can act at a distance • That magnets attract or repel each other and attract some materials, such as metals and not others, like plastics. • That everyday materials can be grouped together on the basis of whether they are attracted to a magnet or not. • That magnets have a north and south pole. • That a north and south pole will attract but the same poles will repel. 		Children will know: <ul style="list-style-type: none"> • That unsupported objects fall because of the force of gravity. • That air resistance, water resistance and friction can decrease the speed of moving surfaces. • That friction is A force between two surfaces as they move across each other that always slows an object down. • That air resistance is a frictional force that acts to slow an object's movement when it moves through air. • That water resistance is a frictional force that acts to slow an object's movement when it moves through water. • Mass is the amount of matter that an object or substance contains Mass is measured in grams (g) or kilograms (kg) using a scale or the kg scale on a force meter. • Weight is a measure of gravitational force. Weight is measured in newtons (N) using a force meter. • That some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. 	
SKILLS				Children will be able: <ul style="list-style-type: none"> • To compare how things move on different surfaces • To identify that some forces need contact between two objects, but magnetic forces can act at a distance • To observe how magnets attract or repel each other and attract some materials and not others • To 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 • To describe magnets as having two poles • To predict whether two magnets will attract or repel 		Children will be able: <ul style="list-style-type: none"> • To explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object • To investigate the effects of air resistance, water resistance and friction, that act between moving surfaces • To identify that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. 	
	VOCABULARY						
				Magnetism Poles Predict Forces Repel		Gravity Resistance Levers Pully Gears Unsupported Mass Weight	



ELECTRICITY

	KS1 Science National Curriculum	KS2 Science National Curriculum <i>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 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 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</i>			KS2 Science National Curriculum <i>associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit 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 use recognised symbols when representing a simple circuit in a diagram</i>
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	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
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KNOWLEDGE					<p>Children will know:</p> <ul style="list-style-type: none"> • That common appliances run on electricity, including a kettle, a lamp and television. • That a circuit is a collection of components connected by wires through which electricity can flow. • That a circuit contains several basic parts • That a battery is a number of cells connected together. • That a buzzer is a component that makes a sound when part of a complete circuit. • That a switch is component that can make or break a circuit. • That a wire is a conductive core coated in insulating plastic that an electric current flows through, connecting other electrical components. • That a conductor is a material through which an electric current can flow. • That an insulator is a material that does not allow an electric current to pass through. • That some common conductors are iron, silver, copper and aluminum. • That some common insulators are plastic, glass, wood and rubber. • That metals are good conductors. 		<p>Children will know:</p> <ul style="list-style-type: none"> • That the brightness of a lamp or the volume of a buzzer is caused by the number and voltage of cells used in a circuit. • That an electric current is the flow of electric charge through a circuit. For an electric current to flow, a circuit must be complete. The electric current flows from the cell through the components and back to the cell. • That in a circuit, the cell acts like a pump, pushing electric charge around the circuit. This pushing force can be measured using a voltmeter or multimeter. The pushing force is known as voltage, which is measured in volts (V). • That cells have different names, such as AA, AAA and D. They are labelled with the voltage they supply to a circuit. For example, an AA cell is labelled with 1.5V. As cells are used, their voltage, or pushing force, decreases.
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SKILLS					<p>Children will be able:</p> <ul style="list-style-type: none"> • To identify common appliances that run on electricity. • To construct a simple series electrical circuit, identifying and naming its basic parts • To identify whether or not a lamp will light in a simple series circuit • To identify that a switch opens and closes a circuit • To name some common conductors and insulators, and associate metals with being good conductors. 		<p>Children will be able:</p> <ul style="list-style-type: none"> • To associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit • To 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 • To use recognised symbols when representing a simple circuit in a diagram.
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VOCABULARY

					<p>Circuit Conductor Insulator Series circuit Switch Electricity</p>		<p>Representations Volume Simple circuit Cells Voltage</p>
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EARTH AND SPACE						
		KS1 Science National Curriculum		KS2 Science National Curriculum		KS2 Science National Curriculum <i>describe the movement of the Earth and other planets relative to the sun in the solar system</i> <i>describe the movement of the moon relative to the Earth</i> <i>describe the sun, Earth and moon as approximately spherical bodies</i> <i>use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky</i>
	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
KNOWLEDGE						Children will know: <ul style="list-style-type: none"> • That there are eight planets in the Solar System: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune. • That the planets closer to the Sun are terrestrial planets because they are made of rock. • That planets that are farther from the Sun are made of gas and are called gas giants. • That the Earth is the only one to support life • That the Earth rotates on an axis. One rotation takes 24 hours, which is one day. • That the Earth orbits the Sun once every 365.25 days, which is a year. • That the Moon takes 27.5 days to do one full orbit the Earth. • That the Sun, Earth and Moon are spherical shaped bodies. • That day and night are caused by the Earth's rotation on its axis, which takes 24 hours. Half of the Earth is always facing the sun, which is the half where it is daytime. Whilst the other half is facing away from the sun, which is night time.
SKILLS						Children will be able: <ul style="list-style-type: none"> • To describe the movement of the Earth, and other planets, relative to the Sun in the solar system • To describe the movement of the Moon relative to the Earth • To describe the Sun, Earth and Moon as approximately spherical bodies • To use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.
VOCABULARY						
						Axis Spherical body Orbit Approximately Solar system Space



EVOLUTION AND INHERITENCE

		KS1 Science National Curriculum		KS2 Science National Curriculum		KS2 Science National Curriculum <i>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</i>			
		EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	
KNOWLEDGE								Children will know: <ul style="list-style-type: none"> • That living things have changed over time • That fossils provide information about living things that inhabited the Earth millions of years ago • That living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents • That animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. 	
								Children will be able: <ul style="list-style-type: none"> • To identify that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago- • To identify that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents • To identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. 	
		VOCABULARY							
								Evolution Offspring Environment Inhabited Fossil	

SCIENCE							
	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
CROSS CURRICULAR LINKS							
ENRICHMENT:							
APSIRE		<p>Children will present their Science learning at the APSIRE event. They will be able to talk about their learning process. Prompt questions for parents to include:</p> <p>Plants</p> <p>Seasonal Changes</p> <p>Everyday materials</p> <p>Animals including humans</p>	<p>Children will present their Science learning at the APSIRE event. They will be able to talk about their learning process. Prompt questions for parents to include:</p> <p>Animals including Humans</p> <p>Plants</p> <p>Use of everyday materials</p> <p>Use of everyday materials (Summer)</p>	<p>Children will present their Science learning at the APSIRE event. They will be able to talk about their learning process. Prompt questions for parents to include:</p> <p>Forces and Magnets</p> <p>Plants</p> <p>Light</p> <p>Animals including humans</p> <p>Rocks</p> <p>Forces and Magnets</p>	<p>Children will present their Science learning at the APSIRE event. They will be able to talk about their learning process. Prompt questions for parents to include:</p> <p>Electricity</p> <p>Sound</p> <p>States of matter</p> <p>Animals including humans</p> <p>Living things and their habitats</p>	<p>Children will present their Science learning at the APSIRE event. They will be able to talk about their learning process. Prompt questions for parents to include:</p> <p>Earth and Space</p> <p>Properties and changes of materials</p> <p>Living things and their habitats</p> <p>Animals including humans</p> <p>Forces</p>	<p>Children will present their Science learning at the APSIRE event. They will be able to talk about their learning process. Prompt questions for parents to include:</p> <p>Evolution and Inheritance</p> <p>Light</p> <p>Living things and their habitats</p> <p>Animals including humans</p> <p>Electricity</p>