

Great Waltham Primary School Science - Progression in Knowledge 2022-23 Cycle A

Biology	EYFS	Y1	Y2	Y3	Y4	Y5	Y6
Biology Plants National Curriculum Statements	Understanding the World/The Natural World Explore the natural world around them. Make observations of animals and plants and explain why some things occur, and talk about changes	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	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		Describe the life process of reproduction in some plants and animals (Living things and their habitats)	
Biology Plants GWPS Teaching progression	<u>Spring 1</u> To talk about why things happen and how things work. Jack and the Beanstalk <u>Spring 2</u> To look closely at a flower and identify the different parts	<u>Summer 2</u> To describe and compare plants, seeds and bulbs. To name and compare the parts of plants. To identify and name some common garden and wild plants. Plant hunt around the school. To identify and name some common trees. Tree hunt around the school. To name, sort and compare some common fruit and vegetable plants.	<u>Summer 2</u> To plan and set up an investigation into how seeds should be planted. To label the main parts of plants and trees. To explain the life cycle of plants. To explain what plants need to grow well. To write a conclusion that answers a question about how seeds should be planted.	<u>Summer 1</u> What do I know about plants? - To name the different parts of flowering plants and explain their jobs. To set up an investigation to test our theories about what plants need to grow well. To set up an investigation to observe how roots grow. To investigate the way in which water is transported within plants. To name the different parts of a flower and explain their role in pollination and fertilisation.		Making new plants part 1 (Living things and their habitats)	

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		To name and compare some common plants and trees.		To understand and order the stages of the life cycle of a flowering plant Enrichment – cc PSHE To identify changes related to scientific ideas by describing the achievements of George Washington Carver . To explain how George Washington Carver helped farmers to grow crops.			
Biology Animals including humans National Curriculum Statements	Understanding the World/The Natural World Explore the natural world around them. Make observations of animals and plants and explain why some things occur, and talk about changes	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	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	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	Describe the changes as humans develop to old age.	Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function Describe the ways in which nutrients and water are transported within animals, including humans
Biology Animals including Humans GWPS Teaching progression	<u>Autumn 1</u> I will be recognising similarities and differences between each other I will be going on local walks around the school.	Autumn 1 To identify, name and compare parts of our body. To compare and group sounds	<u>Autumn 1 Growing Up</u> To match, sort and group young animals and their adults. To find out how animals change as they grow into adults.	<u>Summer 2</u> What do we need to eat to stay healthy? To Identify that humans get the nutrition they need from what they eat. To explore the nutritional values of different foods	<u>Spring 2</u> To be able to identify and classify carnivores, herbivores and omnivores. PB1 To be able to construct and interpret a variety of food chains.	<u>Spring 2</u> Human timeline Gestation period Growth of Babies Puberty	<u>Autumn 2</u> To describe how the human circulatory system works. To investigate and describe the main function of the heart.

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	<p>I will be learning about different parts of the body. I will be talking about past events in my life.</p> <p>I will be recognising similarities and differences between each other I will be using all five senses to investigate area around them I will be learning about different parts of the body.</p> <p>I will be learning about different parts of the body.</p> <p><u>Spring 2</u></p> <p>To know the names for the offspring animals (not human). To identify different animals that live in a woodland.</p> <p>To sequence the life cycle of an animal. To name different mini-beasts.</p>	<p>To describe and compare smells</p> <p>To explore the sense of touch</p> <p>To understand how our sight enables us to find out about the world</p> <p>To use our sense of taste</p> <p><u>Summer 1</u></p> <p>To identify and name common animals.</p> <p>To describe and compare the structure of a variety of common animals.</p> <p>To identify, name and sort animals that are herbivores, carnivores and omnivores.</p> <p>To name, identify and label the parts of the human body.</p> <p>To sort animals according to a criteria.</p>	<p>To compare the stages of the human life cycle. (characteristics)</p> <p>To compare the stages of the human life cycle.(Ordering)</p> <p>To find out if children are faster when they are older</p> <p>To research and describe what animals, including humans, need to survive.</p> <p>Aut 2 – Taking Care</p> <p>To sort food into different groups.</p> <p>To understand the importance of healthy eating.</p> <p>To test the effects of exercise on the human body.</p> <p>To describe different ways to stay hygienic.</p> <p>To present information about staying healthy in a book for younger children.</p>	<p>Do animals eat the same foods as humans? What do our pets eat? To carry out an investigation to find out what pets eat.</p> <p>Do all animals have a skeleton inside their body? Are all animal's skeletons the same? To sort animal skeletons into groups, discussing patterns and similarities and differences.</p> <p>Why do we have a skeleton? To explore human and animal skeletons. To names some of the bones in our body. To investigate an idea about how the human skeleton supports movement.</p> <p>How do muscles help us move? To find out what muscles are and how skeletal muscles help us to move. To explain how bones and muscles work together to create movement.</p>	<p>To identify the different types of teeth in humans and identify their functions.</p> <p>To explore different ways of keeping teeth healthy.</p> <p>To investigate how the digestive system works.</p> <p>To be able to describe the functions of the basic parts of the digestive system.</p>	<p>Changes in old age</p> <p>Life Expectancy</p>	<p>To pose and answer a range of relevant questions about how blood transports gases round the body</p> <p>To identify the contents of blood and describe their function.</p> <p>To describe the impact of diet and exercise on human health.</p> <p>To explain how water helps humans' and other animals' bodies to function.</p> <p>To understand the main food groups and how to create a balanced meal</p> <p>Recognise the impact of diet, exercise, drugs and lifestyle on the way bodies function.</p>
<p>Biology</p> <p>Living things and their habitat (Evolution)</p>	<p>Children know about similarities and differences in relation to places, objects, materials and living things</p> <p>They talk about the features of their own immediate environment</p>		<p>Explore and compare the differences between things that are living, dead, and things that have never been alive</p> <p>Identify that most living things live in habitats to which they are suited and describe how different</p>		<p>Recognise that living things can be grouped in a variety of ways</p> <p>Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment</p>	<p>Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird</p> <p>Describe the life process of reproduction in some plants and animals</p>	<p>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</p>

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National Curriculum Statements	and how environments might vary from one another		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		Recognise that environments can change and that this can sometimes pose dangers to living things		Give reasons for classifying plants and animals based on specific characteristics Evolution 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
Biology Living things and their habitat (Evolution) GWPS Teaching progression	Autumn 1 I will be using all five senses to investigate area around them I will be going on local walks around the school, including a visit to the church. I will be recognizing similarities and differences between each other I will develop a sense of place.		Summer 1 To recognise things that are living, once lived and have never lived in some habitats. To observe and identify what plants and animals live in different habitats. To construct examples of food chains for a selection of habitats. To identify ways in which living things are suited to their habitat.	Enrichment Environment/climate change Autumn 1 _cc PSHE L19. that people's spending decisions can affect others and the environment (e.g. Fair trade, buying single-use plastics, or giving to charity)	Summer 1/2 To construct and interpret food chains. To group living things in a range of ways. To generate questions to use in a classification key. To use a key to identify invertebrates. To create a classification key. To recognise positive and negative changes to the local environment. To describe environmental dangers to endangered species. Reporting on findings	Spring 1 Making new plants part 1 Mammals Jane Goodall Metamorphosis	Summer 1/2 To understand that living things can be classified into groups 1. To understand that living things can be classified into groups 2. To explore the classification of animals and recognise the main groups of vertebrates. 1 To explore the classification of animals and recognise the main groups of invertebrates. 2 To recognise that micro-organisms are groups of living things and explain what they are. Edward Jenner – small pox vaccination

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							<p>To apply the process of classification to plants.</p> <p>To understand features of living things can be inherited, affected by the environment or a combination of both.</p> <p><u>Summer 2 Evolution</u></p> <p>To learn about selective breeding.</p> <p>To explore and understand ways in which living things are adapted to suit the environments in which they live and to help them survive.</p> <p>To evaluate variables that contribute to the extinction of living things.</p> <p>To understand the theory of natural selection.</p> <p>To explore and understand ways in which living things are adapted to suit the environments in which they live and to help them survive.</p> <p>To evaluate variables that contribute to the extinction of living things.</p> <p>To understand the theory of natural selection.</p>
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Chemistry	EYFS	Y1	Y2	Y3	Y4	Y5	Y6
Chemistry Materials and their properties/ states of matter (Rocks) National Curriculum Statements	Materials Children know about similarities and differences in relation to places, objects, materials and living things They make observations of animals and plants and explain why some things occur, and talk about changes They know the properties of some materials and can suggest some of the purposes they are used for.	Materials 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	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	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	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	Materials 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	
Chemistry Materials and their properties/	Spring 1 To explore properties of materials through	Spring 1 Everyday Materials To identify and name three everyday materials. Collins	Spring 1 Materials and their properties To describe objects, including naming the	Spring 1/2 Rocks What do we want to know/find out?.	Spring 1/2 States of Matter To investigate gases and explain their properties.	Autumn 1 Properties and changes of materials Introduce unit of work - knowledge organiser and	

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<p>states of matter (Rocks)</p> <p>GWPS Teaching progression</p>	<p>cooking - making porridge. To look closely at similarities, differences, patterns and change.</p> <p>To explore properties of materials - shoes.</p> <p>To look closely at similarities and differences, identifying building materials (UW).</p> <p>Spring 2 Learn about the lives of significant individuals in the past - Mary Anning /Isaac Newton</p>	<p>To identify and name four everyday materials Collins</p> <p>To tell the difference between a material and the object it is made from.</p> <p>To describe the properties of everyday materials.To identify and name paper in a variety of forms.</p> <p>To identify and name a variety of fabrics. Collins</p> <p>Spring 2 To recognise most objects are made from more than one material.</p> <p>To describe how the same type of object can be made using different materials</p> <p>To investigate the stretchiness and flexibility of selected materials</p> <p>To explore the properties of absorbency and waterproofing</p>	<p>material from which they are made.</p> <p>To identify objects made of particular materials.</p> <p>To explain if a material is a good choice for an object.</p> <p>To test different fabrics to find out how much light passes through.</p> <p>To compare balls to find out how bouncy they are.</p> <p>Spring 2</p> <p>To test objects to see whether their shapes can be changed.</p> <p>To investigate how properties of materials allow their shapes to be changed.</p> <p>To choose materials that have the properties needed for making particular things.</p> <p>To test the strength of different paper and find the strongest one to wrap a present.</p> <p>To design and make a paper bridge to hold a toy car.</p>	<p>To compare and group different types of rocks based on their appearance</p> <p>To explore how rocks are formed and compare different types of rock. Natural /Manmade</p> <p>To investigate the properties of rocks.</p> <p>To identify rocks that are used for particular purposes</p> <p>To explore what fossils are and how they are formed</p> <p>To investigate Mary Anning and her contribution to palaeontology</p> <p>To explore soil and how it is formed.</p> <p>To investigate the permeability of soil</p>	<p>Experiment to investigate if air weighs anything.</p> <p>To investigate materials as they change state.</p> <p>Experiment to investigate whether materials that melt all melt at the same temperature.</p> <p>To explore how water changes state.</p> <p>Experiment to identify the different states of water.</p> <p>To investigate how water evaporates.</p> <p>Experiment to investigate what happens when you leave two beakers of water in two different places over a certain period of time.</p> <p>Experiment to observe the process of condensation.</p> <p>To identify and describe the different stages of the water cycle.</p> <p>Experiment to view evaporation, condensation and precipitation in action. Mini water worlds</p>	<p>complete definitions of classification of materials task.</p> <p>Irreversible changes</p> <p>Grouping and Classifying Materials</p> <p>Growing Crystals</p> <p>Separating Mixtures</p> <p>How can we clean our dirty water?</p> <p>Assessment</p>	
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Physics	EYFS	Y1	Y2	Y3	Y4	Y5	Y6
Physics Seasonal changes National Curriculum Statements	Looks closely at similarities, differences, patterns and change – in relation to the four seasons and when different weather occurs	Observe changes across the 4 seasons Observe and describe weather associated with the seasons and how day length varies					
Physics Seasonal changes GWPS Teaching progression	<u>Spring 2</u> Understand the effect of changing seasons on the natural world around them Describe what they see, hear, and feel whilst outside. Understand the effect of changing seasons on the natural world around them. Describe what they see, hear, and feel whilst outside. To explain changes that happen in spring.	<u>Autumn 1</u> Seasons lesson – Autumn <u>Autumn 2</u> To describe the impact that seasonal change has on our lives. To observe, describe and compare the changing seasons of the year. Autumn walk To create a season window using evidence collected. To describe how the weather can affect us. To describe the weather and how it varies at different seasons of the year. To explore how animals adapt in the winter. <u>Spring 2</u>					

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		<p>To observe and describe how day length varies.</p> <p>To observe changes across the four seasons.</p>					
<p>Physics</p> <p>Sound, light and electricity</p> <p>National Curriculum Statements</p>				<p>Light Recognise that they need light in order to see things and that dark is the absence of light</p> <p>Notice that light is reflected from surfaces</p> <p>Recognise that light from the sun can be dangerous and that there are ways to protect their eyes</p> <p>Recognise that shadows are formed when the light from a light source is blocked by an opaque object</p> <p>Find patterns in the way that the size of shadows change</p>	<p>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</p> <p>Find patterns between the pitch of a sound and features of the object that produced it</p> <p>Find patterns between the volume of a sound and the strength of the vibrations that produced it</p> <p>Recognise that sounds get fainter as the distance from the sound source increases</p> <p>Electricity Identify common appliances that run on electricity</p> <p>Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers</p> <p>Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is</p>		<p>Light Recognise that light appears to travel in straight lines</p> <p>Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye</p> <p>Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes</p> <p>Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them</p> <p>Electricity Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit</p> <p>Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches</p> <p>Use recognised symbols when representing a simple circuit in a diagram</p>

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					<p>part of a complete loop with a battery</p> <p>Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit</p> <p>Recognise some common conductors and insulators, and associate metals with being good conductors</p>		
Physics Sound, light and electricity GWPS Teaching progression	<u>Autumn 2 Light</u> To explore how light can shine through some materials.			<u>Autumn 2 Light</u> To explore how we need light to see things and why some things are easier to see than others. To recognise dark as the absence of light. To explore how we see things. To explore the sun as a light source and to know the difference between night and day. To know that light from the sun can be dangerous and that there are ways we can protect our eyes. To notice that light is reflected from surfaces - by choosing the most reflective material for a new book bag. To use a mirror to reflect light and explain how mirrors work. Exploring mirrors	<u>Autumn 1 Sound</u> To describe and explain sound sources. To find out that sounds are made when objects and materials vibrate. Experiment: to investigate how different objects make vibrations which create sounds. To explain how different sounds travel. To investigate whether sounds can travel through different materials. Experiment: to investigate the materials that sound waves pass through in order to reach our ears To explore ways to change the pitch of a sound. To investigate how sounds can be different pitches and volumes.		<u>Autumn 1 Light</u> To consolidate the key ideas from Year 3 about the behaviour of light, including light sources and shadows To describe how a mirror reflects an image of an object. Light travels in straight lines. To apply understanding of how light travels to explain how a periscope and other applications of mirrors work. To understand that light travels in straight lines and make a periscope to test this theory. To identify the variables that affect the size of a shadow, and plan a fair test to investigate one of them. To recognise that whilst light does travel in straight lines, sometimes it

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				<p>To investigate which materials block light to form shadows. Making a shadow puppet.</p> <p>To find patterns when investigating how shadows change size.</p>	<p>Experiment: to investigate pitch and how it can be changed. To find out how the length, thickness and tightness of a string affects its pitch.</p> <p>To find out how sounds can be made by air vibrating and how to change the pitch of notes produced by vibrating air. Experiment: to investigate how the thickness of the strings on a stringed instrument affects the pitch</p> <p>To explain how different sounds travel.</p> <p>To explore the relationship between distance and volume. Experiment: to see what happens to sound as it gets further away</p> <p>To investigate ways to absorb sound. To find out that some materials are effective in preventing vibrations from sound sources reaching the ear.</p> <p>Experiment: To investigate which materials will be best for soundproofing.</p> <p>To make a musical instrument to play different sounds. Alexander Bell</p>		<p>changes direction when travelling from one thing into another.</p> <p>To understand that white light is made of many colours and these can be separated out.</p> <p><u>Spring 1/2 Electricity</u></p> <p>To introduce (revise) a simple circuit and the factors that make it work.</p> <p>To understand simple circuit symbols and be able to use them in diagrams.</p> <p>To introduce a parallel circuit to those more able</p> <p>To reinforce circuits and associated diagrams.</p> <p>To understand that adding more cells to a circuit will have an effect on the circuit.</p> <p>To understand the role and importance of a switch.</p> <p>To know there are different types of switch.</p> <p>To know and recognise where common switches are used in the home etc.</p> <p>To reinforce the concept that more components in a circuit need more power. To understand that the type of wire / thickness of</p>
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					<p><u>Electricity Autumn 2</u> To explain ways that electricity is generated.</p> <p>To identify electrical appliances and the types of electricity they use.</p> <p>To investigate the differences between mains and battery powered circuits.</p> <p>To identify complete and incomplete circuits.</p> <p>To investigate circuits and their different components.</p> <p>To identify and sort materials into electrical conductors or insulators.</p> <p>To recognise some common conductors and insulators, and associate metals with being good conductors.</p> <p>To investigate the purposes of conducting and insulating materials.</p> <p>Thomas Edison</p> <p>To explain how a switch works and why they are needed.</p> <p>To be able to use knowledge of conductors and insulators to create switches to complete a circuit.</p>		<p>wire affects how well electricity (flow of electrons) can flow and that we call this resistance.</p> <p>That we use resistance to control devices.</p> <p>To understand how electricity is made.</p> <p>To understand how the different ways we generate electricity today.</p>
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					<p>To record and report on an investigation.</p> <p>To be able to plan and carry out an experiment to see how to change the brightness of a bulb.</p>		
<p>Physics</p> <p>Forces including Earth and Space</p> <p>National Curriculum Statements</p>	<p>Developing ideas of grouping, sequences, cause and effect in relation to movement i.e toys, cars, rough surfaces</p> <p>They know the properties of some materials and can suggest some of the purposes they are used for. They are familiar with basic scientific concepts such as floating, sinking, experimentation.</p>			<p>Forces & Magnets</p> <p>Compare how things move on different surfaces notice that some forces need contact between 2 objects, but magnetic forces can act at a distance</p> <p>Observe how magnets attract or repel each other and attract some materials and not others</p> <p>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</p> <p>Describe magnets as having 2 poles</p> <p>Predict whether 2 magnets will attract or repel each other, depending on which poles are facing</p>		<p>Earth & Space Describe the movement of the Earth and other planets relative to the sun in the solar system</p> <p>Describe the movement of the moon relative to the Earth</p> <p>Describe the sun, Earth and moon as approximately spherical bodies</p> <p>Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky</p> <p>Forces</p> <p>Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object</p> <p>Identify the effects of air resistance, water resistance and friction, that act between moving surfaces</p> <p>Recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect</p>	
<p>Physics</p>	<p>Spring 1</p> <p>Talks about why things happen and how things work</p>			<p>Autumn 1 Forces and magnets</p> <p>o explore what forces are and notice that some forces need contact</p>		<p>Summer 1/2 Earth and Space</p> <p>Describing the Sun, Earth and Moon as</p>	

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<p>Forces including Earth and Space</p> <p>GWPS Teaching progression</p>	<p>Talks about why things happen and how things work - floating and sinking.</p> <p>Spring 2 Learn about the lives of significant individuals in the past - Mary Anning / Newton</p>			<p>between two objects but magnetic forces can work at a distance. What is a force? How can you make it start to move?</p> <p>To compare how things move on different surfaces. How well can an object slide on different surfaces?</p> <p>To compare how things move on different surfaces – To discuss, report and evaluate my investigation. What did we find out?</p> <p>To identify magnetic materials. Which Materials are Magnetic?</p> <p>To identify the two poles of a magnet and investigate how magnets attract or repel each other. How do magnets affect each other?</p> <p>To measure the strength of a magnet in different ways. What can magnets do?</p> <p>To investigate uses for magnets.</p>		<p>approximately spherical bodies by understanding how this knowledge has been attained.</p> <p>I can name and describe features of the planets in our solar system. I can order the planets in our solar system</p> <p>Using the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky by examining why the sun appears to move and the arguments for the Earth's rotation.</p> <p>To be able to describe the movement of the Moon relative to the Earth by explaining how the Moon orbits the Earth. I can explain the movement of the Moon.</p> <p>Research - Our solar system fact finding</p> <p>To create a solar system model using toilet paper</p> <p>Autumn 2/Spring 1 Forces To identify the effects of air resistance, water resistance and friction by identifying forces acting on objects. To identify forces acting on objects.</p> <p>To explore the effect that gravity has on objects and</p>	
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						<p>how the first theory of gravity was developed.</p> <p>To identify the effects of air resistance by investigating the best parachute to slow a person down.</p> <p>To explore the effects of water resistance.</p> <p>To identify the effects of friction by investigating brakes.</p> <p>To recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect by exploring and designing a simple mechanism.</p> <p>Independent investigation and written task</p>	
Additional Enrichment during the year	<u>Enrichment March 10th – 19th 2023</u> <u>Science Week Connections</u>	<u>Enrichment March 10th – 19th 2023</u> <u>Science Week Connections</u>	<u>Enrichment March 10th – 19th 2023</u> <u>Science Week Connections</u>	<u>Enrichment March 10th – 19th 2023</u> <u>Science Week Connections</u>	<u>Enrichment March 10th – 19th 2023</u> <u>Science Week Connections</u>	<u>Enrichment March 10th – 19th 2023</u> <u>Science Week Connections</u>	<u>Enrichment March 10th – 19th 2023</u> <u>Science Week Connections</u>