

# Science at Peel Park (Scheme - White Rose)



## Autumn Term 1 & 2

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>Marvellous Mel How can we take care of our teeth?</p> <p>Lesson Sequence:</p> <p><b>LI: Teeth</b></p> <p>L1: I can name the equipment I use to brush my teeth.</p> <p>L2: I can understand the role of a dentist.</p> <p>L3: I can recall how to brush my teeth.</p> <p>L4: I can talk about why we brush our teeth.</p>	<p>What are the 5 senses and what part of my body do I use for them?</p> <p>Lesson Sequence:</p> <p><b>LI: The human body</b></p> <p>L1: To identify, name and label parts of the human body.</p> <p>L2: To identify that eyes are associated with sight.</p> <p>L3: To identify that ears are associated to sound.</p>	<p>What are the needs for survival?</p> <p>Lesson Sequence:</p> <p><b>LI: Animals' needs for survival</b></p> <p>L1: To identify the needs of mammals.</p> <p>L2: To identify different types of birds and what they need to survive.</p> <p>L3: To classify and group fish.</p> <p>L4: To identify amphibians and their needs.</p>	<p>What is a skeleton and why is it important?</p> <p>Lesson Sequence:</p> <p><b>LI: Skeletons</b></p> <p>L1: To identify and name bones in the human body.</p> <p>L2: To explore the functions of the skeleton.</p> <p>L3: To identify bones in a range of animals.</p> <p>L4: To classify animals with and without a spine.</p>	<p>How can I classify animals and plants?</p> <p>Lesson Sequence:</p> <p><b>LI: To group and identify living things.</b></p> <p>L1: To group and classify animals.</p> <p>L2: To explore vertebrates and invertebrates.</p> <p>L3: To group plants.</p> <p>L4: To identify and use classification keys.</p> <p><b>What is the difference between solids, gasses and liquids?</b></p>	<p>What is friction and air resistance?</p> <p>Lesson Sequence:</p> <p><b>LI: Forces</b></p> <p>L1: To explore the effects of friction.</p> <p>L2: To explore the impact of air resistance.</p> <p>L3: To plan and carry out a parachute experiment.</p> <p>L4: To plan and carry out a water resistance experiment.</p> <p>L5: To explore gravity.</p>	<p>Who is Carl Linnaeus and how did he organise living things?</p> <p>Lesson Sequence:</p> <p><b>LI: Living things and their habitats</b></p> <p>L1: To identify the conditions for life.</p> <p>L2: To group organisms.</p> <p>L3: To classify animals.</p> <p>L4: To classify plants.</p> <p>L5: To explore microorganisms.</p>

<p><b>LI: Senses</b> L1: I can identify my 5 senses.</p> <p>L2: I can explore my sense of smell.</p> <p>L3: I can explore my sense of sight.</p> <p>L4: I can explore my sense of touch.</p> <p>L5: I can explore my sense of hearing.</p> <p>L6: I can explore my sense of taste.</p> <hr/> <p><b>Celebrate Good Times.</b> <b>How do we know it's Autumn?</b></p> <p><b>LI: Autumn Season</b> L1: I can say that autumn is a season.</p> <p>L2: I can talk about the changes</p>	<p>L4: To identify that taste is associated with the tongue</p> <p>L5: To identify that the skin helps us to sense touch.</p> <p>L6: To identify that the nose helps us to sense smell.</p> <p><b>What changes happen in different seasons?</b></p> <p><b>LI: Seasonal changes</b> L7: To identify changes in autumn and gather data</p> <hr/> <p><b>What are materials made from and used for?</b></p> <p><b>LI: Materials</b> L1: To identify objects are made from different materials.</p>	<p>L5: To identify reptiles and their needs.</p> <p>L6: To identify a human's needs for survival.</p> <p><b>How does plastic impact our planet?</b></p> <p><b>LI: Plastic</b> L7: To investigate the helpfulness and harmfulness of plastic.</p> <p>L8: To explore how we can reduce plastic in school.</p> <hr/> <p><b>What are the key features of a healthy lifestyle?</b></p> <p><b>LI: Humans</b> L1: To describe the importance of exercise.</p> <p>L2: To understand a balanced diet.</p>	<p>L5: To compare skeletons.</p> <p>L6: To classify joints.</p> <p>L7: To explore how we move.</p> <hr/> <p><b>How do diets vary and how can we reduce food waste?</b></p> <p><b>LI: Nutrition and diet</b> L1: To compare and classify food groups.</p> <p>L2: To compare and recognise diets.</p> <p>L3: To analyse animal diets.</p> <p>L4: To explore food waste and how we can reduce it.</p> <p><b>What are different types of rocks and what are their properties?</b></p> <p><b>LI: Rocks</b></p>	<p><b>LI: States of matter.</b> L5: To explore solids, liquids and gasses.</p> <p>L6: To compare different types of solids, liquids and gasses.</p> <hr/> <p><b>How can I test states of matter?</b></p> <p><b>LI: States of matter.</b> L1: To observe how some materials change states when heated or cooled.</p> <p>L2: To make accurate measurements.</p> <p>L3: To plan a melting experiment.</p> <p>L4: To carry out a melting experiment.</p> <p>L5: To understand the water cycle.</p> <p>L6: To plan an evaporation experiment.</p>	<p>L6: To explore levers, pulleys and gears.</p> <hr/> <p><b>What planets are in the solar system and how do they move?</b></p> <p><b>LI: Space</b> L1: To research the solar system.</p> <p>L2: To explore different planets in the solar system.</p> <p>L3: To describe the movement of the Earth and other planets.</p> <p>L4: To research different ideas over time.</p> <p>L5: To explore the Earths movements.</p> <p>L6: To describe the movement of the Moon.</p>	<p>L6: To classify microorganisms.</p> <p>L7: To research Carl Linnaeus.</p> <hr/> <p><b>How can I test voltage in a circuit?</b></p> <p><b>LI: Electricity</b> L1: To construct and draw series circuits.</p> <p>L2: To identify complete and incomplete circuits.</p> <p>L3: To explore variations within circuits.</p> <p>L4: To plan and carry out a voltage experiment.</p> <p>L5: To research renewable energy and how it is used.</p> <p>L6: To have a renewable energy debate.</p>
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<p>in autumn and observe them.</p> <p>L3: I can talk about different events that are celebrated in autumn.</p>	<p>L2: To identify different types of rock.</p> <p>L3: To explore objects that can be made from different materials.</p> <p>L4: To investigate melting and freezing.</p> <p>L5: To investigate floating and sinking.</p> <p>L6: To investigate absorbency.</p> <p><b>What changes happen in different seasons?</b></p> <p><b>LI: Seasonal changes</b></p> <p>L7: To identify changes in winter and gather data</p>	<p>L3: To understand the importance of hygiene.</p> <p>L4: To identify how to keep teeth healthy.</p> <p><b>What are the properties of materials?</b></p> <p><b>LI: Materials</b></p> <p>L5: To locate and identify different materials.</p> <p>L6: To understand the physical properties of cardboard, wood and paper.</p> <p>L7: To compare brick and rock and their uses.</p>	<p>L5: To identify and group rocks.</p> <p>L6: To test rock strength and permeability.</p> <p>L7: To carry out a rock survey in the local area.</p>	<p>L7: To carry out an evaporation experiment.</p>	<p><b>What is global warming?</b></p> <p><b>LI: Global Warming</b></p> <p>L7: To investigate global warming and the impact it has on living things.</p>	
Spring Term 1 & 2						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6

<p>Traditional Tales Which material is best?</p> <p>Lesson Sequence:</p> <p><b>LI: Materials</b></p> <p>L1: I can learn the names of different materials.</p> <p>L2: I can explore different materials.</p> <p>L3: I can talk about the properties of different materials.</p> <p>L4: I can use the knowledge that I have learnt to design and build a bridge for the Gingerbread Man to cross.</p> <p>L5: I can test my bridge and evaluate my structure.</p> <p><b>LI: Ice Experiment</b></p> <p>L1: I can use my senses to describe</p>	<p>What are the needs of plants?</p> <p>Lesson Sequence:</p> <p><b>LI: Planting A</b></p> <p>L1: To identify what a plant needs to grow in winter.</p> <p><b>How are animals different?</b></p> <p><b>LI: Animals</b></p> <p>L2: To classify mammals.</p> <p>L3: To group birds.</p> <p>L4: To classify and group fish.</p> <p>L5: To identify amphibians.</p> <p>L6: To identify features of reptiles.</p> <p>L7: To compare herbivores, omnivores and carnivores.</p> <hr/>	<p>What do we use different materials for?</p> <p>Lesson Sequence:</p> <p><b>LI: Materials continued.</b></p> <p>L1: To compare glass and plastic and their uses.</p> <p>L2: To identify the uses of metal and its properties.</p> <p>L3: To compare natural and human made fabrics.</p> <p>L4: To explore how objects can be made from different materials.</p> <p>L5: To carry out a bend, squash twist and stretch test.</p> <p>L6: To plan and carry out a waterproof experiment</p> <hr/>	<p>What are fossils and where did they come from?</p> <p>Lesson Sequence:</p> <p><b>LI: Fossils and soils</b></p> <p>L1: To identify what a fossil is and how it is formed.</p> <p>L2: To explore and group fossils.</p> <p>L3: To explore different types of soils and understand the importance of it.</p> <p>L4: To plan a soil experiment.</p> <p>L5: To investigate soil.</p> <p>L6: To evaluate my experiment.</p> <hr/> <p><b>What are different light sources and how do shadows form?</b></p> <p><b>LI: Light</b></p>	<p>What are the elements of sound?</p> <p>Lesson Sequence:</p> <p><b>LI: Sound</b></p> <p>L1: To explore the link between vibrations and sound.</p> <p>L2: To identify parts of the ear and how they help us to hear.</p> <p>L3: To investigate sounds.</p> <p>L4: To explore volume.</p> <p>L5: To explore pitch.</p> <p>L6: To plan and carry out a volume experiment.</p> <hr/> <p><b>What is a circuit and how can conductors and insulators be tested?</b></p> <p><b>LI: Electricity.</b></p> <p>L1: To group common appliances that use electricity.</p>	<p>What are effective materials to use for insulation and conduction?</p> <p>Lesson Sequence:</p> <p><b>LI: Properties of materials</b></p> <p>L1: To investigate properties of materials.</p> <p>L2: To investigate electrical conductivity.</p> <p>L3: To plan an experiment on insulation.</p> <p>L4: To carry out and evaluate the experiment on insulation.</p> <hr/> <p><b>How do lifecycles differ?</b></p> <p><b>LI: Lifecycles</b></p> <p>L5: To compare the lifecycles of mammals to amphibians.</p>	<p>How does light help us to see?</p> <p>Lesson Sequence:</p> <p><b>LI: Light</b></p> <p>L1: To explore light and how we see.</p> <p>L2: To explore shadow formation.</p> <p>L3: To plan and carry out a shadow experiment.</p> <p>L4: To understand refraction.</p> <p>L5: To research light pollution and how to reduce it.</p> <p>L6: To create a persuasive piece of writing on light pollution.</p> <hr/> <p><b>What is the circulatory system?</b></p> <p><b>LI: The circulatory system</b></p>
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<p>the frozen characters.</p> <p>L2: I can make a prediction.</p> <p>L3: I can plan my experiment to say how we will melt the ice to save the character.</p> <p>L4: I can observe the changes to the ice.</p> <hr/> <p><b>This is Africa</b> <b>How can animals survive in the wild?</b></p> <p><b>LI: Habitats</b> L1: I can say what a habitat is.</p> <p>L2: I can identify different habitats found in Kenya.</p> <p>L3: I can compare the African Savanna to our town Accrington.</p>	<p><b>What can I do to take care of the planet?</b></p> <p><b>LI: Caring for the planet.</b></p> <p>L1: To look at why it is important to care for the planet.</p> <p>L2: To explore ways we can care for the planet.</p> <p><b>What changes happen in different seasons?</b></p> <p><b>LI: Seasonal changes</b> L3: To identify changes in spring and gather data</p> <p><b>What are the needs of plants?</b></p> <p><b>LI: Planting B</b> L4: To observe and analyse changes over time.</p>	<p><b>Do all plants grow in the same conditions?</b></p> <p><b>LI: Plants (light and dark)</b> L1: To group and classify plants.</p> <p>L2: To identify parts of a plant.</p> <p>L3: To identify what plants need to grow.</p> <p>L4: To plan an experiment to test what plants need to grow.</p> <p>L5: To investigate plants and what they need to grow.</p>	<p>L1: To identify natural and artificial light sources.</p> <p>L2: To understand the dangers of the sun and how we can protect ourselves.</p> <p>L3: To understand how we see.</p> <p>L4: To investigate opaque, translucent and transparent.</p> <p>L5: To plan and carry out an investigation on shadows.</p>	<p>L2: To build and draw series circuits.</p> <p>L3: To identify and correct errors within circuits.</p> <p>L4: To explore conductors and insulators.</p> <p>L5: To investigate conductors and insulators.</p>	<p>L6: To compare the life cycles of insects and birds.</p> <p><b>What changes occur as we age?</b></p> <p><b>LI: Animals including humans</b> L1: To describe the changes in humans as they develop to old age.</p> <p>L2: To describe and compare changes that have occurred since birth.</p> <p>L3: To compare and classify changes during puberty.</p> <p>L4: To identify changes of adults and the elderly.</p> <p>L5: To compare lifespans and gestation periods of mammals.</p>	<p>L1: To identify the main parts of a circulatory system.</p> <p>L2: To describe ways in which nutrients and water are transported.</p> <p>L3: To identify the parts and function of the heart.</p> <p>L4: To understand oxygenated and deoxygenated blood.</p> <p>L5: To dissect a heart.</p>
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<p>L4: I can talk about the desert.</p> <p>L5: I can name animals found in Kenya.</p> <p>L6: I can talk about the features of some animals in Kenya and how they help them to survive different habitats.</p> <p><b>LI: Nature Nook</b></p> <p>L1: I can identify and talk about the change in weather.</p> <p>L2: I can identify signs of spring.</p>	<p>L5: To plant seeds and make predictions of changes to come</p>					
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Summer Term 1 & 2

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>At the Bottom of the Garden What living things are in our environment?</p> <p>Lesson Sequence:</p>	<p>What are the different plants in my area?</p> <p>Lesson Sequence:</p> <p>LI: Plants</p>	<p>What are habitats and why are they different?</p> <p>Lesson Sequence:</p> <p>LI: Living things and their habitats.</p>	<p>What are the functions of a plant?</p> <p>Lesson Sequence:</p> <p>LI: Plants</p>	<p>What is energy and how can we reduce our usage?</p> <p>Lesson Sequence:</p> <p>LI: Energy</p>	<p>What are the key elements of reproduction?</p> <p>Lesson Sequence:</p> <p>LI: Reproduction</p>	<p>How does diet and drugs effect our lifestyle?</p> <p>Lesson Sequence:</p> <p>LI: Diet, drugs and lifestyle</p>

<p><b>LI: Minibeasts</b> L1: I can say what a minibeast is.</p> <p>L2: I can identify different habitats where I can find minibeasts.</p> <p>L3: I can compare two habitats.</p> <p>L4: I can talk about the life cycle of a frog.</p> <p><b>How do things grow from a seed?</b></p> <p><b>LI: Nature Nook</b> L1: I can identify a plant and a flower.</p> <p>L2: I can say what a plant needs.</p> <p>L3: I can plant a seed. (Sunflower and cress.)</p> <p>L4: I can talk about what will happen as the plant grows.</p>	<p>L1: To identify parts of a flowering plant.</p> <p>L2: To identify parts of a tree.</p> <p>L3: To name and describe wild and garden plants.</p> <p>L4: To name plants in my local area.</p> <p>L5: To explore deciduous and evergreen trees.</p> <p>L6: To identify different trees in my local area.</p> <hr/> <p><b>Where does food come from?</b></p> <p><b>LI: Growing and cooking.</b> L1: To understand where food comes from.</p> <p>L2: To taste and evaluate different</p>	<p>L1: To explore and identify habitats in my local area.</p> <p>L2: To explore and compare polar and desert habitats</p> <p>L3: To explore ocean habitats.</p> <p>L4: To explore woodland and micro habitats.</p> <p>L5: To explore the link between habitats and diet. &amp; To research food chains.</p> <p>L6: To identify living, dead or never alive objects.</p> <hr/> <p><b>What is a lifecycle?</b></p> <p><b>LI: Plants (Bulbs and seeds)</b> L1: To explore and compare bulbs and seeds.</p>	<p>L1: To understand parts of a plant and their functions.</p> <p>L2: To plan an experiment to explore what plants need to grow.</p> <p>L3: To investigate how water is transported within plants.</p> <p>L4: To compare different types of seeds.</p> <p>L5: To explore reproductive plants and the life cycle.</p> <p>L6: To identify different ways seeds can be dispersed.</p> <hr/> <p><b>What are forces?</b></p> <p><b>LI: Forces.</b> L1: To explore push and pull forces.</p>	<p>L1: To research energy and how can we reduce our usage.</p> <p><b>What are classification keys and how can we use them with habitats?</b></p> <p><b>LI: Habitats</b> L2: To research habitats.</p> <p>L3: To use classification keys group living things in the local and wider environment.</p> <p>L4: To research the human impact on habitats.</p> <p><b>What is the impact of deforestation?</b></p> <p><b>LI: Deforestation</b> L5: To understand deforestation and explore the impacts of it.</p> <p><b>What are food chains and how do we impact them?</b></p>	<p>L1: To understand sexual reproduction in mammals.</p> <p>L2: To identify the reproductive parts in plants.</p> <p>L3: To describe pollination.</p> <p>L4: To explore asexual reproduction.</p> <p>L5: To observe over time which parts of a plant are best for cloning.</p> <p><b>How does plastic impact our planet?</b></p> <p><b>LI: Plastic Pollution.</b> L6: To research plastic pollution and the impact it has on the planet.</p> <p>L7: To create a persuasive piece of writing for a debate on the use of plastic.</p> <hr/>	<p>L1: To recognise the impact diets can have of our bodies.</p> <p>L2: To research the impact of drugs and cigarettes on the body.</p> <p>L3: To plan and carry out a heart rate experiment.</p> <p><b>What is the difference in inheritance and characteristics?</b></p> <p><b>LI: Variation</b> L4: To understand variation in offspring.</p> <p>L5: To identify the differences in inheritance and characteristics.</p> <p><b>How is Mary Anning linked to fossils?</b></p> <p><b>LI: Fossils</b> L6: To explore and explain how fossils are formed.</p>
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<p>L5: I can talk about the changes.</p> <hr/> <p><b>Ships Ahoy!</b> How can I make my boat float?</p> <p><b>LI: Floating and Sinking</b> L1: I can say what floating and sinking mean.</p> <p>L2: I can make a prediction - which treasure will float? Sink?</p> <p>L3: I can carry out an experiment.</p> <p>L4: I can recap my knowledge on materials.</p> <p>L5: I can design my own boat.</p> <p>L6: I can test my boat and evaluate my design, reflecting on my choices.</p>	<p>fruit and vegetables.</p> <p>L3: To observe changes over time.</p> <p>L4: To create a plant-based meal using ingredients I have grown.</p> <p><b>What changes happen in different seasons?</b></p> <p><b>LI: Seasonal changes</b> L5: To identify changes in summer and gather data</p> <p>L6: To compare the main changes in each season.</p>	<p>L2: To identify what plants need to grow.</p> <p>L3: To plan a fair test and plant bulbs and seeds.</p> <p>L4: To understand that offsprings grow into adults.</p> <p>L5: To explore lifecycles.</p> <p>L6: To identify if there are any patterns in lifecycles of different animals.</p>	<p>L2: To explore friction and plan an experiment.</p> <p>L3: To carry out an experiment on friction.</p> <p>L4: To explore the properties of a magnet.</p> <p>L5: To investigate magnetic and non-magnetic materials.</p> <p>L6: To explore biodiversity and how we can increase it in our local area.</p>	<p><b>LI: Food Chains</b> L6: To identify and interpret food chains.</p> <p>L7: To draw food chains and explore what would happen if they were affected.</p> <hr/> <p><b>How does diet link to teeth?</b></p> <p><b>LI: The digestive system.</b> L1: To compare carnivore and herbivore teeth. L2: To identify different types of teeth in humans and their simple functions.</p> <p>L3: To understand mouth hygiene.</p> <p>L4: To plan and carry out a tooth decay experiment.</p> <p>L5: To describe the function of the digestive system.</p>	<p><b>What are reversible and irreversible changes?</b></p> <p><b>LI: Reversible and irreversible changes</b> L1: To investigate dissolvable substances. L2: To identify how to separate materials. L3: To investigate solutions and evaporation. L4: To identify reversible changes. L5: To identify irreversible changes (burning). L6: To identify irreversible changes (acid)</p> <p><b>What are the key elements of reproduction?</b></p> <p><b>LI: Reproduction</b> L7: To gather findings and interpret data.</p>	<p>L7: To research Mary Anning.</p> <hr/> <p><b>What is adaptation?</b></p> <p><b>LI: Adaptations</b> L1: To identify how animals have adapted over time. L2: To identify how plants have adapted over time. L3: To understand the process of evolution. L4: To research Charles Darwin L5: To understand natural selection. L6: To explore Darwin's finches.</p> <p><b>How do I carry out an investigation and evaluate my findings?</b></p> <p><b>LI: Themed Project</b> L7: To carry out an investigation and evaluate findings.</p>
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<p><b>Nature Nook</b></p> <p><b>LI: Light and Dark</b> L1: I can say what a shadow is.</p> <p>L2: I can develop an understanding of light and its effect.</p> <p>L3: I can observe how moving an object in front of a light source changes the shadow.</p> <p>L4: I can create my own shadow, exploring spatial awareness, shape and size.</p>				<p>L6: To create a model of the digestive system.</p> <p>L7: To evaluate the tooth decay experiment.</p>		
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