

Subject: Science	Autumn		Spring		Summer	
Year: A	Learning Objectives	Learning task/s	Learning Objectives	Learning task/s	Learning Objectives	Learning task/s
Year groups Year 1/2	<p>I know the different types of weather</p> <p>I know the symbols for different types of weather</p> <p>I can understand that we wear different clothes in winter than in summer, and why we do this</p> <p>I can understand that different things happen in each of the seasons</p> <p>I can understand how the weather affects our activities</p> <p>I can understand how trees change with the seasons</p> <p>I can understand the different ways that animals survive the winter</p> <p>I can collect and represent data about the seasons</p> <p>I can understand how the number of hours of daylight changes throughout the year</p> <p>I know which months are in which seasons</p>	<p>Topic: Weather and Seasons Theme: Seasonal changes Tasks:</p> <ul style="list-style-type: none"> Write information about different weather. Design an outfit for the summer and winter. Write about what people do in different seasons. Describe how trees change with the seasons. write sentences about their favourite things about each season Research and write information about different animals and how they adapt for different weather conditions. Carry out an investigation to find out what people's favourite season is, collect data and populate this onto a graph. Write some sentences to describe what the data tells us. Make a season wheel to help us understand which months are in each season. 	<p>To identify where different materials are used in our homes</p> <p>To classify objects based on the material that they can be made from</p> <p>To recognise that some objects can be made from more than one material</p> <p>To test and record the properties of objects</p> <p>To know a range of properties of materials</p> <p>To understand how a material's properties make it more or less suitable for a particular object</p> <p>To understand where different materials come from</p> <p>To classify materials as being man-made or natural</p> <p>To understand that materials cost money to make</p> <p>To understand why it is important that we use materials in a sustainable way</p> <p>Which material is best for making a bucket to hold water?</p>	<p>Topic: The Great fire of London Theme: Use of everyday materials Tasks:</p> <ul style="list-style-type: none"> Classify and sort objects based on what material they are made from. Use venn diagrams to sort different objects based on the materials they are made from. Test the properties of different items and record what they find. Match definitions to the properties of materials. Discuss and debate why different materials are used for specific objects. Research where different materials come from and create fact files about each material. Create a Reduce, Reuse and Recycle poster. Carryout an Experiment - The buckets used in the Great Fire of London were made of leather, but these often leaked/spilled the water. Is there a better material to use? 	<p>To know the 5 senses and the body parts responsible for them.</p> <p>To use their senses to compare and describe different textures, sounds and smells.</p> <p>To know the names of the main parts of the body.</p> <p>To know the parts of the face.</p> <p>To name a variety of mammals.</p> <p>To name a variety of birds, reptiles, amphibians and fish.</p> <p>To understand some of the differences between mammals, birds, reptiles, amphibians and fish.</p> <p>To understand that different animals have different diets - carnivores, herbivores and omnivores.</p> <p>To identify and name different animal body parts.</p> <p>To compare a variety of common animals.</p> <p>To know that animals give birth to offspring and know the names of different offspring of different animals.</p> <p>To know how to care for and look after animals.</p>	<p>Topic: Under the Sea Theme: Living things and plants/ Animals including humans. Tasks:</p>

<p>Year 3/4</p>	<p>I can compare how things move on different surfaces.</p> <p>I can notice that some forces need contact between two objects, but magnetic forces can act at a distance.</p> <p>I can observe how magnets attract or repel each other and attract some materials and not others.</p> <p>I can compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials.</p> <p>I can describe magnets as having two poles predict whether two magnets will attract or repel each other, depending on which poles are facing</p>	<p>Topic: Forces and Magnets</p> <p>Tasks:</p> <ul style="list-style-type: none"> ● To use a friction experiment by creating ramps and cars to determine how things move on different surfaces. ● Investigate magnetic materials. ● Investigate the pull between magnets. ● To create a homemade compass. ● Parachutes linked to gravity. 	<p>I can 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>I can 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.</p> <p>I can recognise that sounds get fainter as the distance from the sound source increases.</p>	<p>Topic: Sound</p> <p>Tasks:</p> <ul style="list-style-type: none"> ● Carry out a Science sound walk around the grounds. ● Go through a slinky sound demonstration. ● Label parts of the ear and their functions. ● School trip to Discovery 42 Science Exhibition. ● Investigate blocking out sound with different materials. ● Investigate pitch and noise. ● If time, creating vibrating bugs/spinners. 	<p><u>Animals including humans.</u></p> <p>I can 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</p> <p>I can identify that humans and some other animals have skeletons and muscles for support, protection and movement.</p> <p>I can describe the simple functions of the basic parts of the digestive system in humans</p> <p>I can 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.</p> <p><u>Living things and their habitats</u></p> <p>I can recognise that living things can be grouped in a variety of ways.</p> <p>I can explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.</p> <p>I can recognise that environments can change and that this can sometimes pose dangers to living things.</p>	<p>Topic: Animals including Humans.</p> <p>Living things and their habitats.</p> <p>Tasks:</p>
------------------------	---	--	---	--	--	--

<p>Year 5/6</p>	<p>I can explain what gravity is and its impact on our lives.</p> <p>I can identify and explain the effect of air resistance</p> <p>I can identify and explain the effect of water resistance.</p> <p>I can identify and explain the effect of friction.</p> <p>I can explain how levers, pulleys and gears allow a smaller force to have a greater effect.</p>	<p>Parachute investigation - does the size of the parachute matter? Linked to air resistance</p> <p>Levers investigation - how can you lift heavy weights?</p> <p>Water resistance - investigate the shape of boats</p> <p>Friction investigation - using newton meters and shoes to determine extent of friction.</p>	<p><u>Year 5 Materials</u></p> <p>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 now 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>Topic - Materials</p> <p>Tasks - Ito investigate what happens when you mix materials such as sugar and water/different types of rice and pasta</p> <p>Investigate the best material fo working out how to insulate food or drink to keep it warm or cold</p>	<p>SRE incl;uding the following: puberty and body changes how babies are born using Brook Learning schemes</p> <p><u>Year 6 Evolution and their inheritance</u></p> <p>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.</p>	<p>Topic: evolution</p> <p>Investigate how animals adapt</p> <p>Investigate the work of Darwin</p>
------------------------	---	--	--	---	--	--