Long Term Plan – Science in EYFS

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| Cycle A/B | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
| Reception | All about Me | Sparkle and Shine | Starry Night | Sunshine and Sunflowers | Big Wide World | Animal Safari |
| Skills | N/A | * Develop their sense of responsibility and membership of a community. Develop positive attitudes about the differences between people. | * Talk about the different occupations that familiar adults and members of their community have. * With support, observe, record and talk about materials and living things. * Compare and group objects and materials according to simple given criteria. * Make a shadow bigger or smaller using toys, play equipment and a light source. * Explore and describe electrical and non-electrical light sources. | * Observe and describe living things and their habitats within the local environment. * Name and describe basic features of plants and trees. * With support, observe, record and talk about materials and living things. * Describe some ways that plants or animals should be cared for in order for them to survive. | * Take photographs, draw simple picture maps and collect simple data during fieldwork activities * Begin to notice and talk about the different places around the world, including oceans and seas. * Show an awareness of the similarities and differences between people in different communities and groups from around the world. * Make and use simple maps in their play to represent places and journeys, real and imagined. * Begin to notice and talk about the different places around the world, including oceans and seas. * Describe how the weather, plants and animals of one place is different to another using simple geographical terms. * Identify common features for different groups of animals, including wild and domestic animals * Describe how the weather, plants and animals of one place is different to another using simple geographical terms | * Begin to talk about ways to care for a plant or animal. * Identify common features for different groups of animals, including wild and domestic animals. * Match animals to their young * Match animals to the foods that they eat. * With support, observe, record and talk about materials and living things. * Describe how the weather, plants and animals of one place is different to another using simple geographical terms. |
| Knowledge | * Know some similarities and differences between different religious and cultural communities in this country, drawing on their experiences and what has been read in class. | * Talk about the lives of the people around them and their roles in society. * There are adults in our community who work at night time to help us. * The emergency services help us. * The emergency services include the fire service, police and ambulance service. * Explore the natural world around them, making observations and drawing pictures of animals and plants. * An owl is a type of bird. * Most owls are nocturnal. * Owls have special features, such as large eyes, sharp talons and asymmetrical ears. * Sort and group materials and resources and talk about how they are similar or different. * Objects can be compared and grouped according to their shape, colour, material or use. * Develop scientific knowledge through play activities, sharing stories and non-fiction books and discussion. * A shadow is the same shape as the object that makes it. Shadows change during the day. * Shadows are made when a solid object blocks a source of light. * Develop scientific knowledge through play activities, sharing stories and non-fiction books and discussion. * Some light sources need electricity or batteries to work, such as a torch, and some do not, such as candles. * Dark is the absence of light. * It is dark at night because that part of Earth is facing away from the Sun. * During the day, it Is light because that part of Earth is facing towards the Sun. * The Moon can normally be seen in the night sky * The Moon orbits the Earth. * People have visited the Moon. * People travel into space in space shuttles. | * Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. * A habitat is a place where living things live. Local habitats include woodlands, gardens and ponds. Other habitats include hot places, such as deserts, and cold places, such as the Arctic. * Explore the natural world around them, making observations and drawing pictures of animals and plants. * Parts of plants and trees include trunk, branch, twig, roots, stem, flowers and leaves. * A sunflower is a type of plant. * Parts of a plant include the roots, stem, leaves, flowers and petals. * Plants need air, sunlight, warmth, water and nutrients from soil to grow. * Explore the natural world around them, making observations and drawing pictures of animals and plants. * Butterflies feed on nectar from flowers. * They suck the nectar through a long tongue called a proboscis, which they unroll. * Develop scientific knowledge through play activities, sharing stories and non-fiction books and discussion. * Plants and animals are living things. Plants need water, sunlight and air to survive. Animals need food, water, air and shelter to survive. | * Describe their immediate environment using knowledge from observation, discussion, stories, non-fiction texts and maps. * Fieldwork includes going on walks and visits to collect information about the environment. * Explain some similarities and differences between life in this country and life in other countries, drawing on knowledge from stories, non-fiction texts and – when appropriate – maps. * Globes and maps can show us the location of different places around the world. * Know some similarities and differences between different religious and cultural communities in this country, drawing on their experiences and what has been read in class. * Heritage is a person's unique, inherited sense of family identity, including the values, traditions, culture, and artefacts handed down by previous generations. * Some families define their heritage primarily as their ethnic, cultural or national identity. * A map is a picture or drawing of an area of land or sea. * Explain some similarities and differences between life in this country and life in other countries, drawing on knowledge from stories, non-fiction texts and – when appropriate – maps. * A globe is a 3-D model of the Earth. * Maps show 2-D images of places. * Explore the natural world around them, making observations and drawing pictures of animals and plants. * Different animal groups have some common body parts, such as birds have wings and fish have fins. * Explain some similarities and differences between life in this country and life in other countries, drawing on knowledge from stories, non-fiction texts and – when appropriate – maps. * Climates and environments are different, depending on their location on Earth. | * Develop scientific knowledge through play activities, sharing stories and non-fiction books and discussion. * Plants and animals are living things. They need food and water to survive. * Pets are domestic or tamed animals kept for companionship or pleasure. * Explore the natural world around them, making observations and drawing pictures of animals and plants. * Different animal groups have some common body parts, such as birds have wings and fish have fins. * Mammals are animals that breathe air, have warm blood and give birth to live babies. * Reptiles are animals that breathe air, have dry, scaly skin and lay eggs. * Birds are animals that breathe air, have beaks and feathers and lay eggs. * Explore the natural world around them, making observations and drawing pictures of animals and plants. * Animals are living things. There are different types of animal. Parent and baby mammals include cow and calf, sheep and lamb, and cat and kitten. Parent and baby birds include duck and duckling, chicken and chick, and goose and gosling. * Explore the natural world around them, making observations and drawing pictures of animals and plants. * Animals eat different kinds of food, including other animals, plants or both animals and plants. * Carnivores are animals that eat other animals. * Herbivores are animals that eat plants. * Omnivores are animals that eat plants and other animals.. * Different types of animals grow to different lengths and heights * Explain some similarities and differences between life in this country and life in other countries, drawing on knowledge from stories, non-fiction texts and – when appropriate – maps. |
|  | Once Upon a Time | Me and my community/**Exploring Autumn** | Creep, Crawl and Wriggle | Long Ago | Marvellous Machines | Moving on |
| Skills | * Explore and discuss similarities between aspects of their life and life in the past, using books, stories and pictures. * Explore and talk about pictures, stories and information books on the theme of royalty. * Compare and group objects and materials according to simple given criteria. | * Take photographs, draw simple picture maps and collect simple data during fieldwork activities. * Recognise and discuss how they have changed from when they were babies. * Describe how they can look after their environment. * Talk about the different occupations that familiar adults and members of their community have. * Name and talk about man-made features in the local environment, including shops, houses, streets and parks. * Explore the natural world around them and give simple descriptions, following observation, of changes. | NOT YET AVAILABLE | * Make observations about objects and artefacts from the past, such as toys, clothes and other items relating to everyday life. * Explore and discuss similarities between aspects of their life and life in the past, using books, stories and pictures. * Explore and talk about important events in the school or locality's history. * Describe simply how weather changes as the seasons change. * Put familiar events in chronological order, using pictures and discussion. * Recognise and discuss how they have changed from when they were babies. * Talk about past and present events in their own lives and those who are important to them. * Name and sort everyday items into groups of the same material. * Show an awareness of the similarities and differences between people in different communities and groups from around the world. * Describe some similarities and differences between things in the past and the present. * Make observations about objects and artefacts from the past, such as toys, clothes and other items relating to everyday life. | * Explore and discuss similarities between aspects of their life and life in the past, using books, stories and pictures. * Explore and describe electrical and non-electrical light sources. * Describe some similarities and differences between things in the past and the present. * Talk about the different occupations that familiar adults and members of their community have. * Identify that materials have different properties and explore and sort magnetic and non-magnetic materials through play and exploration. | * Talk about past and present events in their own lives and those who are important to them. * Put familiar events in chronological order, using pictures and discussion. * Recognise and begin to talk about how their lives have changed as they have grown. |
| Knowledge | * Know some similarities and differences between things in the past and now, drawing on their experiences and what has been read in class. * The way that people lived in the past is not the same as the way that we live now. There have been changes to schools, play activities, toys, food, transport and clothes * Understand the past through settings, characters and events encountered in books read in class and storytelling. * Kings and queens are known as royalty. Some kings and queens are real people and some are characters in stories. * Sort and group materials and resources and talk about how they are similar or different. * Objects can be compared and grouped according to their shape, colour, material or use. | * Describe their immediate environment using knowledge from observation, discussion, stories, non-fiction texts and maps. * Fieldwork includes going on walks and visits to collect information about the environment. * A community is made up of a group of people who share or live in the same place. * There are different types of communities, such as the family community, the school community and the local community. * Schools are places where we come to learn and make new friends. * Adults in school are there to help us and keep us safe. * The adults at schools have different jobs. * Discuss simple changes as they have grown from being a baby. * People change as they grow and have changed since they were babies, both in their appearance and what they are able to do. * Families are all different. * We are all unique and special. * Change happens to everyone. * Change happens in families and environments. * We change as we grow. * Know ways to care for their local environment. * Litter has a harmful effect on the areas where we live, work and play. * Class rules are there to keep everyone happy and safe. It is important to follow the rules. * Talk about the lives of the people around them and their roles in society. * Describe their immediate environment using knowledge from observation, discussion, stories, non-fiction texts and maps. * Human features are man-made and include houses, shops, buildings, offices, parks, streets and places of worship. * Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. * Living things change over time. This includes growth and decay. * Some plants and trees change with the seasons. For example, new green leaves grow in the spring and some leaves change colour in autumn and fall from the trees. | * Know some similarities and differences between things in the past and now, drawing on their experiences and what has been read in class. * Objects from the past can look different to objects from the present. * The past is made of events that have already happened. * Memories are things we remember from the past. * Historians and archaeologists are people who find out about life long ago.. * The way that people lived in the past is not the same as the way that we live now. There have been changes to schools, play activities, toys, food, transport and clothes. * Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. * Ways to describe daily weather include sunny, rainy, windy, cloudy, warm or cold. Weather is warmer in the summer with more sunshine and colder in the winter with more snow, hail and rain. * Discuss simple changes as they have grown from being a baby. * People change as they grow and have changed since they were babies, both in their appearance and what they are able to do. * The past is made of events that have already happened. * Memories are things we remember from the past. * Discuss simple changes as they have grown from being a baby. * Your history is all the events that have happened in your life. * People grow from being babies to adults. As people grow older, they look different and can do different things. * Sort and group materials and resources and talk about how they are similar or different. * Objects are made from different materials. Everyday materials include, wood, plastic, glass, fabric, metal and stone. Materials have different properties. * All families are unique. They can be of different sizes and have different values, beliefs and traditions. Our families give us our heritage. * Understand the past through settings, characters and events encountered in books read in class and storytelling. * Kings and queens are known as royalty. Some kings and queens are real people and some are characters in stories. * Explore and talk about pictures, stories and information books on the theme of royalty. * Everyday objects, like clothes, vehicles and toys, tell us about the past. They also change over time. | * Know some similarities and differences between things in the past and now, drawing on their experiences and what has been read in class. * The way that people lived in the past is not the same as the way that we live now. There have been changes to schools, play activities, toys, food, transport and clothes. * A machine is a man-made device. * Machines use power to make them move or perform an action. * Develop scientific knowledge through play activities, sharing stories and non-fiction books and discussion. * Some light sources need electricity or batteries to work, such as a torch, and some do not, such as candles. * Batteries power electrical devices, such as torches and toys. * A battery is a store of electric power. * Talk about the lives of the people around them and their roles in society. * The emergency services include fire and rescue, police, RNLI and the ambulance service. * Sort and group materials and resources and talk about how they are similar or different. * Some materials are magnetic, which means that they are attracted to (pull towards) a magnet. Some metals are magnetic. Other materials are non-magnetic, such as wood, dough and glass. | * Know some similarities and differences between things in the past and now, drawing on their experiences and what has been read in class. * Discuss simple changes as they have grown from being a baby. * Change happens to everyone. Changes happen in families and environments. |
|  | Dangerous Dinosaurs | Winter Wonderland |  | Easter |  |  |
| Skills | * Make a shadow bigger or smaller using toys, play equipment and a light source. * Make and use simple maps in their play to represent places and journeys, real and imagined. | * Describe simply how weather changes as the seasons change. * Describe how the weather, plants and animals of one place is different to another using simple geographical terms. * Describe some ways that plants or animals should be cared for in order for them to survive. | Not yet available on system |
| Knowledge | * A shadow is the same shape as the object that makes it. Shadows change during the day. * Develop scientific knowledge through play activities, sharing stories and non-fiction books and discussion. * A map is a picture or drawing of an area of land or sea * Describe their immediate environment using knowledge from observation, discussion, stories, non-fiction texts and maps. | * There are four seasons in the UK. They are spring, summer, autumn and winter. Each season has typical weather associated with it, including sun, rain, wind and snow. * Ways to describe daily weather include sunny, rainy, windy, cloudy, warm or cold. Weather is warmer in the summer with more sunshine and colder in the winter with more snow, hail and rain. * Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. * Explain some similarities and differences between life in this country and life in other countries, drawing on knowledge from stories, non-fiction texts and – when appropriate – maps. * Different places have different climates and weather. * Some animals live in very cold places and have special features that help them to live in the cold. * Develop scientific knowledge through play activities, sharing stories and non-fiction books and discussion. * Plants and animals are living things. Plants need water, sunlight and air to survive. Animals need food, water, air and shelter to survive. * There are lots of different types of bird. * Some animals need us to feed them during winter. |  |