

Science Curriculum Overview 2023-24



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Caterpillars	Exploration of the environment enriched with stories and resources help the children develop an understanding of the world around them. Their exploration is supported by skilful staff developing vocabulary, asking questions and following their interests to encourage the children along their path of scientific enquiry. This enrichment is continued through the Early Years Foundation Stage.					
Nursery	Children continue to use all of their senses to explore their environment and exploration of natural materials. They talk about what they see and are introduced to new vocabulary and observational and investigational skills. Stories, songs, rhymes and interactive displays enhance our children's learning. Children explore and talk about the materials around them and the different forces they can feel. Children find out how things work and are encouraged to ask questions. Children grow vegetables and flowers and learn to care for them over time. They experience the life cycles of some plants and animals and begin to understand the need to respect and care for our world.					

Seasonal Changes

We will observe the changes in the weather and enjoy exploring natural materials associated with Autumn.

Animals

Children will learn about migration.

Animals (including humans)

Me and My Family: Children will learn the basic names of body parts and will look at what body part is associated with each of the senses.

Seasonal Changes

We will observe the changes in the weather and enjoy exploring natural materials associated with Autumn/Winter.

Animals

Night and Day: We will develop a sense of care and respect for our natural environment through our topic of night time animals. We will learn all about the sun/moon and day/night.

Hedgehog Visit

Seasonal Changes

We will observe the changes in the weather and enjoy exploring natural materials associated with Winter/Spring.

Animals

Respect and care for winter birds.

Materials

Traditional Tales: Children will explore and talk about the materials around them and those found in our traditional tales. Children will have opportunities to bake and observe simple experiments.

Science and Technology Week

Seasonal Changes

We will observe the changes in the weather and enjoy exploring natural materials associated with Spring.

Animals

Favourite Stories: We will be looking at different animals from some of our favourite stories and matching them to the baby animals. We will also be exploring habitats.

Animals (including humans)

Children will learn about the importance of healthy foods, hand washing, exercise and rest.

Seasonal Changes

We will observe the changes in the weather and enjoy exploring natural materials associated with Spring/Summer.

Plants/ Animals

What Can I See in the Garden? Observing changes in the garden-What can you see? How is it different? We will be exploring minibeasts and grouping them using simple criteria. We will also look at the life cycle of a butterfly and a chick.

Seasonal Changes

We will observe the changes in the weather and enjoy exploring natural materials associated with Summer.

Plants

Children will plant seeds and care for growing plants. Children begin to understand the need to respect and care for the natural environment and all living things. Windmill Farm Trip

Seasonal Changes

We will observe the changes in the weather and enjoy exploring natural materials associated with Autumn. We will go on a senses walk to explore Autumn.

Who Am I? - All about me

Animals (including humans)

Children will learn the basic names of body parts and will look at what body part is associated with each of the senses. Children will look at similarities and differences between themselves and their friends. Children will continue to use their senses when exploring Harvest.

How Are We Different?

Animals (including humans)

Through reading different stories, children will compare themselves to others from different countries. Children will also compare and contrast Antarctica, Africa and England including animals. Children will taste a variety of fruit.

Materials

Children will explore different materials and discuss which will keep us warm. Children will conduct simple experiments to test their predictions.

Seasonal Changes

We will observe the changes in the weather and enjoy exploring natural materials associated with Winter. We will go on a senses walk to explore Winter.

Who Are Our Heroes?

Animals (including humans)

Using the story Supertato and looking at people who help us in our school, we will look at healthy eating. We will sort fruit and vegetables into groups and make healthy snacks. We will also grow our own cress to use for sandwiches later on in the half term. We will introduce the children to Florence Nightingale and compare her to other heroes. Children will continue to label the human body.

Science & Technology Week

What Could This Be?

Animals

Children will learn about sea creatures, farm animals, wild animals and local animals. They will make comparisons to other animals. Children will draw different animals. We will look at local birds and migration routes.

Materials

Children will look at floating and sinking and conduct simple experiments to see which materials are best suited. Knowsley Safari Park Trip

Seasonal Changes

We will observe the changes in the weather and enjoy exploring natural materials associated with Summer. We will go on a senses walk to explore Summer.

Who Lives in Storyland?

Plants

We will be exploring the outdoor area and closely observing plants. We will look at similarities and differences, paying attention to the plants structure.

Materials

We will be observing, naming and describing different materials linking to our traditional tales. We will explore materials further through simple experiments.

Plants

Children will be provided with opportunities to observe plants and identify the basic structure of a flowering plant. Children will plant flowers and learn how to care for them. We will conduct a simple experiment to learn what plants need to grow.

Everyday Materials

Children distinguish between an object and the material from which it is made. They identify and name a variety of everyday materials: describing their simple physical properties and comparing and grouping on the basis of those properties.

Seasonal Changes

Children observe changes across the four seasons. They observe and describe weather associated with the seasons and how day length varies.

Local walk**Animals (including humans)**

Children identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. To perform simple tests – compare and contrast humans in our class.

Seasonal Changes

Children observe changes across the four seasons. They observe and describe weather associated with the seasons and how day length varies.

Animals

Children identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. Children identify a variety of common animals that live in hot and cold habitats. They identify and name some common animals that are carnivores, herbivores and omnivores. They describe and compare the structure of a variety of common animals.

Seasonal Changes

Children observe changes across the four seasons. They observe and describe weather associated with the seasons and how day length varies.

Science & Technology Week**Zoo Trip****Plants**

Children identify and name a variety of common wild and garden plants including deciduous and evergreen trees. They identify and describe the basic structure of a variety of common flowering plants, including trees. Children observe, compare and contrast plants. Children can compare and contrast leaves. Children identify which parts of a plant can be eaten.

Seasonal Changes

Children observe changes across the four seasons. They observe and describe weather associated with the seasons and how day length varies.

Flower Show**Beach Trip**

Living Things and Their Habitats

Children explore the differences between things that are living, dead, and never been alive. They learn about habitats and are introduced to micro habitats and simple food chains.

Coastal, pinewoods & sand dunes

Use of Everyday Materials

Children investigate materials and compare their suitability for particular uses. Children identify natural and manmade materials. Children research famous scientist Charles Mackintosh. They find out how the shapes of solid objects can be changed.

Science & Technology Week

Plants

Children observe and describe how seeds and bulbs grow into mature plants. They can describe the life cycle of a plant. They find out what plants need to grow and stay healthy.

Pine trees, sand dunes, plants

Animals (including humans)

Children learn that animals including humans have offspring which grow into adults. Children understand that life cycle of a butterfly. Children understand the basic needs of animals, including humans, for survival. Children can recognise, order and compare the key stages of a human life cycle. Children learn the importance of exercise, a nutritional diet, hygiene, sleep and sensible amounts of screen time.