**Ghost Hill Infant and Nursery School**

Eastfield, Taverham, Norwich, NR8 6PJ

# Long Term Curriculum Map for Science

| | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
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| **Nursery & Reception** | EYFS use the provision maps and the Summary of Science in EYFS document to inform continuous provision and an adult led science focus, including working scientifically. This will be seen in both floor books and the environment. Examples include exploring outside to gain real life experiences of seasonal changes. The building blocks of Scientific knowledge are built though real-life experiences, opportunities to experiment and the children's immediate interests. There is an EYFS Curriculum Progression Map for UTW which is the closest link to science for EYFS. | | | | | |
| **Year One** | **Materials**<br>NC link:<br>-Distinguish between an object and the material from which it is made.<br>-Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.<br>-Describe the simple physical properties of a variety of everyday materials.<br>-Compare and group together a variety of everyday materials on the basis of their simple physical properties.<br><br>**Work scientifically:** performing simple tests to explore questions, for example: 'What is | **Plants**<br>NC link:<br>-Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.<br><br>**Work scientifically:** observing closely, perhaps using magnifying glasses, and comparing and contrasting familiar plants; describing how they were able to identify and group them, and drawing diagrams showing the parts of different plants including trees. Pupils might keep records of how plants have changed over time, for | **Animals including humans**<br>NC link:<br>-Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.<br><br>**Work scientifically:** using their observations to compare and contrast animals at first hand or through videos and photographs, describing how they identify and group them; grouping animals according to what they eat; and using their senses to compare different textures, sounds and smells. | **Materials**<br>*Note: Build on previous learning in this unit with a more 'working scientifically' focus.*<br>NC link:<br>-Distinguish between an object and the material from which it is made.<br>-Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.<br>-Describe the simple physical properties of a variety of everyday materials.<br>-Compare and group together a variety of everyday materials on the basis of their simple physical properties. | **Plants**<br>NC link:<br>-Identify and describe the basic structure of a variety of common flowering plants, including trees.<br><br>**Work scientifically:** observing closely, perhaps using magnifying glasses, and comparing and contrasting familiar plants; describing how they were able to identify and group them and drawing diagrams showing the parts of different plants including trees. | **Animals including humans**<br>NC link:<br>-Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.<br>-Identify and name a variety of common animals that are carnivores, herbivores and omnivores.<br>-Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).<br><br>**Work scientifically:** using their observations |

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| | the best material for an umbrella? ...for lining a dog basket? ...for curtains? ...for a bookshelf? ...for a gymnast's leotard?' | example the leaves falling off trees and buds opening; and compare and contrast what they have found out about different plants. | | **Work scientifically:** performing simple tests to explore questions, for example: 'What is the best material for an umbrella? ...for lining a dog basket? ...for curtains?...for a gymnast's leotard?' | | to compare and contrast animals at first hand or through videos and photographs, describing how they identify and group them; grouping animals according to what they eat; and using their senses to compare different textures, sounds and smells. |
| | **Seasonal Change in Year 1** – Covered across the year. Seasonal Changes are explicitly taught within one lesson each half term. Regular opportunities to discuss the impact of seasonal change are created throughout daily provision. | | | | | |
| **Year Two** | **Materials**<br>NC link:<br>-Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.<br>-Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. | **Animals including humans**<br>NC link:<br>-Notice that animals, including humans, have offspring which grow into adults.<br>-Find out about and describe the basic needs of animals, including humans, for survival (water, food and air).<br>-Describe the importance for humans of exercise, eating the right amounts of | **Plants**<br>*Note: Seeds and bulbs need water to grow but most do not need light; seeds and bulbs have a store of food inside them.*<br>NC link:<br>-Observe and describe how seeds and bulbs grow into mature plants.<br>-Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. | **Plants**<br>NC link:<br>-Observe and describe how seeds and bulbs grow into mature plants.<br>-Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.<br><br>Outside planting.<br><br>**Work scientifically:** observing and recording, with some accuracy, the | **Living things and their habitats**<br>NC link:<br>-Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other.<br>-Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, | **Living things and their habitats**<br>NC link:<br>-Explore and compare the differences between things that are living, dead, and things that have never been alive. -Identify and name a variety of plants and animals in their habitats, including microhabitats.<br><br>**Work scientifically:** sorting and classifying things according to whether they are living, |

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| | **Work scientifically:** comparing the uses of everyday materials in and around the school with materials found in other places (at home, the journey to school, on visits, and in stories, rhymes and songs); observing closely, identifying and classifying the uses of different materials, recording their observations. | different types of food, and hygiene.<br><br>**Work scientifically:** observing, through video or first-hand observation and measurement, how different animals, including humans, grow; asking questions about what things animals need for survival and what humans need to stay healthy; and suggesting ways to find answers to their questions. | **Work scientifically:** observing and recording, with some accuracy, the growth of a variety of plants as they change over time from a seed or bulb, or observing similar plants at different stages of growth; setting up a comparative test to show that plants need light and water to stay healthy. | growth of a variety of plants as they change over time from a seed or bulb, or observing similar plants at different stages of growth; setting up a comparative test to show that plants need light and water to stay healthy. | and identify and name different sources of food.<br><br>**Work scientifically:** They could construct a simple food chain that includes humans (e.g. grass, cow, human). They could describe the conditions in different habitats and find out how the conditions affect the number and type(s) of plants and animals that live there. | dead or were never alive, and recording their findings using charts. They should describe how they decided where to place things, exploring questions for example: 'Is a flame alive? Is a deciduous tree dead in winter?' and talk about ways of answering their questions. They could describe the conditions in different micro-habitats (under log, on stony path, under bushes) and find out how the conditions affect the number and type(s) of plants and animals that live there. |
| | **Seasonal Change in Year 2: Year 2 –** Year 2 revisit Seasonal Change through discussion and within other units. For example, during the unit plants or looking at micro-habitats - weather charts are made and a discussion about noticing changes to the weather happens. | | | | | |

**Rationale:**

KS1 cover seasonal changes throughout the year when changes can be observed outside so that children can make links between the knowledge required and real-life experiences.

**Seasonal Changes**

NC link:

-Observe changes across the four seasons.

-Observe and describe weather associated with the seasons and how day length varies.

**Work scientifically:** making tables and charts about the weather; and making displays of what happens in the world around them, including day length, as the

seasons change.