



Science

Science Intent

Through science, children are taught to be curious about the world around them. Our curriculum is stimulating, engaging and challenging and ensures full coverage of the National Curriculum. It fosters a sense of wonder about natural phenomena. Children develop and use a range of scientific skills including questioning, fair-testing and drawing conclusions. Scientific vocabulary is taught and built upon as topics are revisited progressively in different year groups and across key stages.

Science – National Curriculum/Skills

Plants (over the year, observing seasonal change)

- observe and describe how seeds and bulbs grow into mature plants
- find out and describe how plants need water, light and a suitable temperature to grow and stay healthy

Work Scientifically by:

- asking their own questions about what a plant needs / can do without and recognising how they can answer these
- observing closely, using simple equipment such as hand lenses and easyscopes
- performing simple tests to find out what will happen if a plant is deprived of certain perceived essentials
- using their observations and ideas to suggest answers to questions
- gathering and recording data to help in answer the above questions

Overview

Learn about the life of a horse chestnut tree when the conkers have fallen. Place this event in a series of stages, order them all and discover that there is no beginning, no end and that it is a cycle. Observe our horse chestnut tree through the seasons and note the stages as they happen.

Grow seeds and observe the changes over time.
Investigate how water, light and temperature make a difference.



Science – National Curriculum/ Skills	Overview
<p>Everyday Materials</p> <ul style="list-style-type: none">• identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses• find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.• recognise what solids and liquids are• be able to state simple properties of solids and liquids• be able to suggest different ways of melting and freezing materials <p>Work Scientifically by:</p> <ul style="list-style-type: none">• asking simple questions and recognising that they can be answered in different ways• observing closely, using hand lenses• performing simple tests to find out where chocolate melts fastest.• identifying and classifying different materials and solids/liquids• using their observations and ideas to suggest answers to questions including making their own suggestions for melting and freezing• gathering and recording data on melting in tabular form.• Saying what they have found out from their results.	<p>Sort everyday materials according to the material they from which they are made. Survey the school grounds using a tally chart to collect data on materials found. Identify and explore different solids and liquids and find out for themselves, the simple properties of each. Observe the melting of ice over time and begin to identify different variables affecting this. Investigate the melting of chocolate, thinking of their own ideas of places to try, timing the process, collecting data in a table, analysing results and saying what they have found out.</p>



Science – National Curriculum knowledge/skills	Overview
<p>Animals and Their Habitats</p> <ul style="list-style-type: none">• explore and compare the differences between things that are living, dead, and things that have never been alive• 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• identify and name a variety of plants and animals in their habitats, including microhabitats• describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food. <p>Work Scientifically by:</p> <ul style="list-style-type: none">• asking simple questions and recognising that they can be answered in different ways• observing closely, using simple equipment such as hand lenses and easy-scopes• performing simple tests to find out which food is most suitable for a particular animal• identifying and classifying animals according to their key features using ID cards and keys.• using their observations and ideas to suggest answers to questions• gathering and recording data to help in answering questions.	<p>Explore our wild area habitat, collect animals and plants and identify them. Learn how camouflage works by investigating how different colours determine number of caterpillars eaten by predators. Analyse collected information and make a bar chart to present results. Investigate food preferences of snails or chickens, setting up and tallying and reporting information gathered.</p> <p>Distinguish between vertebrates and invertebrates and classify vertebrates according to 5 main classes.</p> <p>Learn about what an animal or plant needs from its habitat and relate this to life processes.</p> <p>Investigate which food is most suitable for a particular chosen animal and collect data to establish if our predictions were correct.</p> <p>Construct a simple food chain.</p>



MEDIUM TERM PLANNING | UNIT OBJECTIVES

Nunthorpe Primary Academy

Year Group: 2

Science – National Curriculum knowledge/skills	Overview
Animals inc Humans Health and Growth – see cross curricular topic	