Streetsbrook Infant & Early Years Academy

Curriculum Overview

Title: Curriculum Overview – Science, Year 1

Autumn 1	***Back to the Future*** Plants - Identifying common wild and garden plants - Identify, label and describe the parts of a flowering plant (roots, stem, leaves, petals, fruits and flowers) - Identify, label and describe the parts of a tree (roots, trunk, branches, leaves, fruit and blossom) - Compare deciduous and evergreen trees - Describe the similarities and differences between trees and sort leaves according to simple criteria Seasonal change – Autumn - Identify signs of Autumn in the local environment – Allotment visit to observe flowers and vegetables - Use simple scientific vocabulary to describe and record observations, using drawings or labels - Describe changes in the weather during Autumn by collecting simple weather data, using simple equipment such as thermometers and rain gauges with support - Describe how day length changes during Autumn and the impact of seasonal changes on daily life - Observe changes in animals, plants and weather over time (link to long-term investigation), recording and looking for patterns in results
Autumn 2	***Let's Celebrate*** Everyday materials - Distinguish between an object and the materials from which it is made - Identify everyday common materials, including wood, plastic, glass, metal, water and rock Animals, including humans - Identify and label basic parts of the human body - Identify the five senses and match to the relevant body parts - Describe the function of major body parts and compare human bodies - Carry out a simple investigation into the human body with an investigation into the five senses - Describe how animals prepare for and behave during Winter

Spring 1	***Whole World in Our Hands*** Seasonal change – Winter - Identify signs of Winter in the local environment - Use simple scientific vocabulary to describe and record observations, using drawings or labels - Describe changes in the weather during Winter by collecting simple weather data, using simple equipment such as thermometers and rain gauges with support - Describe how day length changes during Winter and the impact of seasonal changes on daily life - Observe changes in animals, plants and weather over time (link to long-term investigation), recording and looking for patterns in results Animals, including humans *(depending on the length of the half-term, some of these may need to be carried over to Spring 2)* - Identify and name common animals and compare similarities and differences - Over a series of lessons, describe and compare the five different animal groups: fish, amphibians, reptiles, birds and mammals e.g. all (female) birds lay eggs, all mammals give birth to live young
Spring 2	***It's a Mystery*** Science Week Focus Animals, including humans *(depending on the length of the half-term, some of these may need to be brought forward to Spring 1)* - Identify and describe what animals eat and classify them by their diet: herbivores, carnivores and omnivores - Over a series of lessons, describe and compare the body parts and features of a variety of common animals, including fish, amphibians, reptiles, birds and mammals, including pets. e.g. fish have scales, birds have wings, mammals have a backbone & Seasonal change – Spring - Identify signs of Spring in the local environment - Use simple scientific vocabulary to describe and record observations, using drawings or labels - Describe changes in the weather during Spring by collecting simple weather data, using simple equipment such as thermometers and rain gauges with support - Describe how day length changes during Spring and the impact of seasonal changes on daily life - Observe changes in animals, plants and weather over time (link to long-term investigation), recording and looking for patterns in results

Summer 1	***Underground Overground*** Plants - Describe what plants need to grow and make predictions about plant growth - Over a series of lessons, measure and record plant growth, using simple scientific vocabulary – use sunflower seeds or beans. & Everyday materials - Describe the physical properties of everyday materials, using vocabulary such as hard, soft, rough, smooth, waterproof and absorbent - Compare and group materials based on their properties, using simple classification skills and explain sorting decisions - Complete an investigation by testing materials for different properties and record results in simple tables e.g. which material is the most absorbent?
Summer 2	***Here & There*** Animals, including humans - Practical enquiry into which animals they can see in and around the local environment - Use secondary sources of information to investigate which animals they might see at the seaside - Investigate whether the sounds we hear “Here” (school/Shirley) and “There” (the seaside) are the same, through the use of block graphs, tally charts or pictograms. & Seasonal change – Summer - Identify signs of Summer in the local environment - Use simple scientific vocabulary to describe and record observations, using drawings or labels - Describe changes in the weather during Summer by collecting simple weather data, using simple equipment such as thermometers and rain gauges with support - Describe how day length changes during Summer and the impact of seasonal changes on daily life - Observe changes in animals, plants and weather over time (link to long-term investigation), recording and looking for patterns in results

Title: Curriculum Overview – Science, Year 2

Autumn 1	***Caring, Sharing, Daring*** Recap on 'what is science?' and how to work scientifically, with a focus on making observations. Animals, including humans – focus on health and hygiene - Begin long term investigation into how humans change over time - Know the basic needs of animals, including humans for survival (water, food and air) - Discuss the different types of food groups and the need to eat the right amounts, including sorting foods into healthy and unhealthy. - The importance of hygiene, including handwashing and dental hygiene, including a simple test looking at the impact of handwashing on the growth of mould. (Working Scientifically) - The importance of exercise
Autumn 2	***Compare & Contrast*** Living things and their habitats – Woodlands - Identify the feature of a woodland habitat - Understand the difference between, living, dead and never alive - Identify animals and their young - Identify a simple food chain within the context of a woodland habitat
Spring 1	***Making a Difference*** Uses of everyday materials - Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses e.g. a drinks bottle is made from plastic so that it is waterproof and holds water, a book is made from paper so that it can be printed on and pages turned easily. - Investigate how the shapes of some objects made from different materials can be changed by squashing, bending, twisting and stretching. E.g. a metal fork vs a wooden fork. (Working Scientifically) Living things and their habitats – Oceans - Perform a simple test (link to oceans) about which items should and should not be flushed away in a toilet. - Identify why some creatures are suited to a particular habitat - Investigate a microhabitat e.g. a coral reef or a shell - Explore lifecycles within the seas and oceans

Spring 2	***What Was it Like?*** Science Week Focus (Working Scientifically) Plants - Make observations of seeds and bulbs - Observe what most plants need to grow and be healthy - Investigate what will happen to the growth of a plant if it doesn't have access to one of the following: water, soil, light, air and heat. (Working Scientifically) Uses of everyday materials - Identify and compare the suitability of different everyday materials for particular uses e.g. a home built during the Great Fire of London compared with a modern day home with fire safety features.
Summer 1	***Sensational Safari*** Living things and their habitats – Savannah - Predict what we might find in a savannah habitat - Identify whether a living thing is suited to a savannah habitat - Construct a simple food chain within the context of a savannah habitat - Identify things that are living, dead and never alive - Ask questions about animals and use secondary sources of information to investigate the answers.
Summer 2	***Growing Together*** Animals, including humans – Growing and changing - Recognise how our bodies have changed since we were a baby (Link with PSHE) - Describe how offspring grow into adults, using the vocabulary reproduction, baby, toddler, child, teenager, adult, old person and the names of some animals and their offspring, such as cat/kitten, caterpillar/butterfly etc. - Conclude a long-term investigation into how their bodies have changed throughout Year 2 e.g. height, number of adult teeth and increased speed and stamina. (Working Scientifically)