



Nursery

**All About Me/Seasons**  
 Use all of their senses in hands on exploration of natural materials  
 Talk about what they see, using a wide vocabulary  
 Talk about the differences between materials and changes that they notice

**Journeys/Transport & Winter/Christmas**  
 Explore how things works  
 Explore and talk about different forces they can feel  
 Talk about the differences between materials and the changes that they notice  
 Use all of their senses in hands on exploration of natural materials

**Dinosaurs**  
 Explore collections of different materials with similar and/or different properties  
 Begin to understand the need to respect and care for the natural environment and all living things.

**Growing and Changing**  
 Plant seeds and care for growing plants  
 Understand the key features of the life cycle of a plant  
 Begin to understand the need to respect and care for the natural environment and all living things  
 Talk about what they see using a wide vocabulary

**Animals and their Babies**  
 Understand the key features of a life cycle of an animal  
 Begin to understand the need to respect and care for the natural environment and all living things

**Heroes and Adventurers**  
 Explore how things work  
 Use all of their senses in hands on exploration of natural materials  
 Explore and talk about different forces they can feel

Foundation

Similarities and differences between the natural world and contrasting environments

Explore the natural world around them Describe what they hear, see and feel whilst outside  
 Understand the effect of changing seasons in the natural world around them  
 Autumn - Discuss features of autumn (Local walk)  
 Winter - Discuss features of winter

Similarities and differences between the natural world and contrasting environments  
 Space - How is space different to Earth?

Make observations. Drawings pictures of animals and plants  
 Explore the natural world around them  
 Describe what they hear, see and feel whilst outside  
 Similarities and differences between the natural world and contrasting environments  
 Growing - observe, draw and grow cress and sunflowers  
 Science Week

Make observations. Drawings pictures of animals and plants  
 Similarities and differences between the natural world and contrasting environments

Year 1

**Superheroes - Human Biology**  
 Know different parts of the body *Head, shoulders, knees, toes, neck, fingers, thumbs, arm, leg, elbow, face, eye, hair, mouth, teeth, ear, nose*  
 Know what parts of the body are for  
 Relate hearing to ears  
 Relate touch to skin  
 Relate seeing to eyes  
 Recognise the senses of taste and smell  
 Features and changes between the four seasons – *weather, leaves, trees, light, animal presence and activity – hibernation, nesting, migration*  
 Day length  
 Autumn – Aut 1

**Dinosaurs - Chemistry**  
 Identify and describe materials: *fabric, wood, plastic, glass, metal, water, rock, brick, paper, elastic, foil, hard/soft; stretchy/stiff; shiny/dull; rough/smooth; bendy/not; absorbent/not; opaque/transparent*  
 What materials are things made of? Why are different materials used for different purposes?  
 Strength, protectiveness and waterproofing of materials  
 Evaluation of materials- what is the best material for?  
 Can we protect a falling object?  
 Can we prevent an object getting wet?

**Space – Physics (Space)**  
**SUN DANGER**  
 We live on Earth  
 The solar system – planets *Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune*  
 Sun and moon – know that Earth orbits the sun and the moon orbits the Earth  
 How day and night happen – the earth spins on its axis.  
 Weather and day length  
 Winter - Spr 1  
**Observe movement of sun, Earth and moon (orrery)**

**Around the World – Animal Biology**  
 Identify and name mammals (*big 5, fox, badger, otter, rat*), fish (*roach, pike, perch*) birds (*crow, magpie, wood pigeon*) and pets (*hamster, cat, dog, rabbit*)  
 Identify and name herbivores, carnivores and omnivores  
 Identify amphibians (*newt, frog*), reptiles and invertebrates  
 Know the structure of common animals  
 Ocean animals (Su 2, in Water, Water)

**Gardener's World – Plant Biology**  
 Know the structure of plants (*stem, petal, leaf, flower, roots, seed, bulb*)  
 Observe plants  
 Name common plants (*daisy, dandelion, nettle, dock*) and trees (*oak, willow, pine*)  
 Know the structure of trees (*leaf, blossom, fruit, roots, trunk, branches*) and seasonal changes  
 Use magnifying glasses to observe  
 Spring – Summer 1  
**Observe plant growth**  
**STATISTICS: Draw and interpret 1:1 pictogram**

**Water - Physics (Forces)**  
 How can you make something move?  
 Explain a movement  
 Push, pull, twist, squeeze  
 What stops a movement  
 Explore how to make something move faster or further  
 Summer – Summer 2  
**What happens when you push, pull, turn and squeeze?**

Year 2

**Great to be Me - Biology (Human and Animal)**  
 What humans need to survive  
 What animals need to survive *food, water, air*  
 Animal babies and growth *lamb / sheep; owl, panda, penguin*  
 Human babies and growth

**The Great Fire of London – Chemistry**  
 Group and compare materials  
 Explore and discuss the suitability of materials for different uses *wood, metal, plastic, glass, brick, rock, paper and cardboard*  
 Water, Ice and Steam  
 How can I make ice melt faster?  
 Properties of materials  
 John Dunlop  
**What affects the rate at which an ice lolly melts?**

**India – Human Biology**  
 Name food groups  
 Describe a healthy diet  
 Hygiene  
 Exercise  
 The effect of exercise on the body  
 Life processes of living things *eat, breathe, move*  
**STATISTICS: Draw and interpret pictograms in 2s, 5s, and 10s.**  
**The effect of exercise on the body.**

**Medicine – Animal biology**  
 Living and non-living things  
 Classify plants into habitats  
 Animal adaptations to habitats  
 Micro-habitat – what's under a log?  
 Food chains  
 What does a snail like to eat?  
**What do snails like to eat?**  
**STATISTICS: Interpret and draw block diagrams**

**Going Wild - Plant Biology**  
 What does a plant need to grow? *Air, light, water, soil*  
 Bulbs and seeds; Plant lifecycle  
**Factors which affect a plant's growth**  
**STATISTICS – Read information from simple tables;**  
**Ask and answer questions about totals and comparisons from tables**

**Inventions – Physics (Electricity)**  
 Identify electrical appliances  
 Identify battery operated appliances  
 Construct a simple circuit  
 Name and draw parts of a circuit -*NOT circuit diagrams*  
**What conducts electricity?**