Ladysmith Federation

EYFS and Key Stage 1 Science Overview

	Autumn	Spring	Summer
EYFS Early Learning Goals	**Understanding the World: The natural world** • Explore the natural world around them, making observations and drawing pictures of animals and plants; • Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class; • Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.		
Nursery Including Forest School	**During the children's time in Nursery they will be learning to (from Development Matters):** Use all their senses in hands-on exploration of natural materials. Explore collections of materials with similar and/or different properties. Talk about what they see, using a wide vocabulary. Explore how things work. Plant seeds and care for growing plants. Understand the key features of the life cycle of a plant and an animal. Begin to understand the need to respect and care for the natural environment and all living things. Explore and talk about different forces they can feel. Talk about the differences between materials and changes they notice.		
Reception Including Forest School	**During Reception children will be learning to (from Development Matters):** Explore the natural world around them. Describe what they see, hear and feel whilst outside. Recognise some environments that are different to the one in which they live. Understand the effect of changing seasons on the natural world around them.		
Year 1	Animals, including humans • identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.	Materials • describe the simple physical properties of a variety of everyday materials • compare and group together a variety of everyday materials on the basis of their simple physical properties.	Animals, including humans • identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals • describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)

	Materials • distinguish between an object and the material from which it is made • identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock	**Animals, including humans** • identify and name a variety of common animals that are carnivores, herbivores and omnivores	**Plants** • identify and name a variety of common wild and garden plants, including deciduous and evergreen trees • identify and describe the basic structure of a variety of common flowering plants, including trees.
Forest School	• observe changes across the four seasons • observe and describe weather associated with the seasons and how day length varies.	• observe changes across the four seasons • observe and describe weather associated with the seasons and how day length varies.	• observe changes across the four seasons • observe and describe weather associated with the seasons and how day length varies. • Plants (Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. Basic structure of common flowering plants, including trees)
Year 2	**Living things and their habitats** • 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	**Plants** • 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.	**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 • find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.
	Animals, including humans • notice that animals, including humans, have offspring which grow into adults • find out about and describe the basic needs of animals, including humans, for survival (water, food and air) • describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	**Living things and their habitats** • identify and name a variety of plants and animals in their habitats, including micro-habitats • 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.	**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 • find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.
Forest School	Seasonal changes and weather	Plants Look at how plants need water, light and suitable temperature to grow and stay healthy Materials – investigate materials	Plants Look at how plants need water, light and suitable temperature to grow and stay healthy Living things and their habitats Looking at the habitats of invertebrates and plants

Key Stage 2 Science Overview

	Autumn	Spring	Summer
Year 3	**Rocks** Comparing rocks, fossils, how soils are formed	**Forces** Magnetism	**Animals** Nutrition, skeleton, movement
	Light Light sources, reflections, shadows		**Plants** Structure of flowering plant, conditions for growth, seed dispersal
Year 4	**Sound** How sounds are made & travel; vibrations; pitch/volume; how we hear	**Teeth & Eating** Digestive system, teeth	**Classification, habitats & food chains** Grouping living things according to physical characteristics; classification keys; how habitats can change; food chains
	Electrical Circuits Simple circuits, components, switches; safety; conductors & insulators	**Changes of State** Properties of solids, liquids & gases; changes of state; water cycle	
Year 5	**Earth and Space** Movement of earth, moon, sun and planets	**Forces** Gravity, air and water resistance/friction; gears and pulleys	**Life Cycles** Mammals, insects, birds, amphibians, human life cycle, reproduction in some plants
	Properties & changes of materials Comparing, separating materials; changes of state; dissolving, uses of materials; reversible & non-reversible changes		
Year 6	**Electricity** Investigate effect of changing components in a circuit; use symbols in circuits	**Light** How light travels; how we see; how shadows are formed	**Evolution & Inheritance** Fossils; how living things have changes over time adaptations to habitat
	Heart & Circulation Heart, circulation, blood vessels; effect of diet, exercise & drugs of the body; how nutrients are transported around the body		**Classification** How living things are grouped according to physical characteristics, including micro-organisms, plants and animals