Subject Overview

Science (EYFS & KS1)						
	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Nursery	Animals including humans *Naming the different body parts; following rules to keep safe; Understand what we do to keep healthy.*	Materials *Compare materials and objects by their size and hardness; Investigate which objects float and which objects sink; Identify some different materials that are used to make things; Suggest uses for different materials that are hard, soft, bendy or waterproof; Identify some objects than need power to work.*	Light *Identify shadows created by the sun; Investigate how the shape and size of shadows can change.*	Living things and their habitats *Identify different animals and pets as being animals; Compare how some animals are similar and different describing their body parts; Describe what a familiar pet eats; Identify what animals need to stay alive and how to care for an animal; Observe the local environment and talk about some of the things that live there; Suggest how a living thing might change over time.*	Plants *Identify the different parts of plants and trees; draw pictures of plants that have flowers leaves stems and petals; Identify what plants need to survive; Say how a plant will change over time.*	Seasonal Changes *Describe what the weather can be like; Compare the weather in the summer and in the winter; Compare the length of the day in summer to winter (with reference to lighter evenings and what they can do afterschool); Describe natural phenomena of weather, clouds and rainbows.*
Reception	Animals including humans *Describe what some body parts are for with reference to senses and movement; Recall that we have different rules for different places to keep us safe; Identify what we do to keep healthy and explain why it is important.*	Materials *Identify the different materials things are made from; Compare and group objects according to their shape, colour, material or use; Investigate which materials are magnetic; Predict which materials will float and sink and suggest how we would know; Identify some light sources that need power to work.*	Light *Describe what gives a shadow its shape; Describe how shadows change throughout the day; Explain how to make a shadow bigger or smaller using a light source.*	Plants *Identify and describe the features of plants; Sort and name different plants and trees according to their leaves, seeds and flowers; Describe what plants need to stay alive and how we can look after them.*	Living things and their habitats *Group animals into groups based on their body parts; Describe what animals need to stay alive; Identify the different foods that animals eat; Describe how living things change over time; Match adult animals to their young; Investigate the living things in a local habitat.*	Seasonal changes *Describe what the weather can be like; Describe how the weather changes at different times of the year; Compare the length of the day in summer to winter; Name and describe natural phenomena such as sizes of shadows, colours of the rainbow; speed of clouds in the sky; flooding and strengths of waves.*
Year 1	Animals including humans *Identifying and naming common animals; Describing and comparing the structure of common animals; Grouping animals as Carnivores, herbivores and omnivores; Identifying and naming parts of the human body; the five senses; Comparing humans.*		Plants *Describing plants; Identifying and naming parts of a plant; planting and growing plants; finding and identifying common plants; sorting plants; identifying plants and parts of plants that we eat; identifying trees; describing and sorting leaves.*		Everyday Materials *Identifying materials; describing the properties of materials; describe what materials make different objects; grouping materials; investigating the properties of materials*	Seasonal Changes *Naming the seasons, describing the seasons, understanding how rain changes at different times of the year.*
Year 2	Animals including humans *Identifying the basic needs of humans; Understands the differences between animals and their offspring; Describing the life cycles of humans and animals; Explain the importance of exercise, healthy diets, hygiene and medicine in human health.*		Plants *Identify which plants and parts of plants we eat; Investigate different kinds of seeds and how they grow; Identify the needs of plants to grow; Explain where plants grow; Describe the life cycle of different plants.*		Materials *Identify and describe different materials; Explain why different objects are made of the material; Investigate the different properties of materials; describe how some materials are able to change size or shape.*	Living things and their habitats *Sort things that are living, dead or have never lived; Identify the different plants and animals in microhabitats; Describe the different habitats around the world; Explain how animals have changed to be suited to their habitats.*

Subject Overview

Science (KS2)						
	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Year 3	Animals including humans *Identify bones and muscles within the human body; Investigate the link between size and strength; Compare the difference between different animal skeletons; Explain how different foods are important parts of our diet.*	Rocks *Identify and describe the appearance of rocks; Investigate the properties of rocks; Describe the steps in the rock cycle; Identify the different layers of rocks and soils; Investigate different kinds of soil; Explain how fossils are formed.*	Plants *Explain what plants need to grow; Explain the role of different parts of plants; Explain the structure and function of roots; Describe how water is transported around a plant, Explain the function of the parts of a flower; Explain how seeds are dispersed.*		Light *Define light; Describe what reflected light is; Explain the dangers of the sun; Describe and investigate shadows.*	Forces and magnets Define and name different forces; Investigate forces on different; Explain how magnets work; Investigate which materials are *magnetic; Investigate the strength of different magnets*
Year 4	Animals including humans *Identify and describe the function of organs in the digestive system; Identify and describe the functions of different teeth; Investigate the effect of different liquids on the health of teeth; Describe how energy flows through a food chain.*	Sound *Explain how sounds are made; Explain how sounds travel; Describe the structure and function of the ear; Investigate pitch and volume; Investigate materials that block or absorb sound.*	Living things and their habitats *Identify the life processes; Group living things; Define animals as vertebrates and invertebrates; Investigate habitats in the local area; Use classification keys to identify animals; Explain the impact of environmental changes on habitats.*		Changing states *Identify the different states of matter; Investigate different liquids; Explain how to use a thermometer; Name the different changes of state; Describe the steps in the water cycle; Investigate rates of evaporation.*	Electricity *Identify common electrical appliances; Construct simple circuits; Identify problems in circuits; Describe and investigate conductors and insulators; Explain how switches work.*
Year 5	Animals including humans *Describe the life cycle of humans; Identify stages of development within the womb; Identify the changes that occur during puberty; Explain what happens to humans when they get older.*	Space and earth *Name and order the different planets; Describe the shape of celestial bodies; Describe the movement of the planets and the moon; Explain why we have day and night; Describe the phases of the moon.*	Living things and their habitats *Define the different life processes; Describe how reproduction occurs in mammals and in other animals; Describe how plants reproduce; Describe the life cycles of plants and animals.*		Materials *Describe the properties of the different states of matter; Compare the properties of different materials; Investigate heat insulation; Investigate magnetic materials; Investigate which materials dissolve; Explain how to separate materials; Describe changes that are irreversible*	Forces and magnets *Describe gravity and friction; Investigate the force of friction on different surfaces; Explain air and water resistance; Explain how gears, levers and pulleys work.*
Year 6	Animals including humans *Identify the parts of the circulatory system; Describe the structure and function of the heart; Investigate pulse; Describe how water and nutrients are absorbed into the body; Describe things that are healthy for our bodies and things that are unhealthy.*	Light *Describe how light travels; Investigate materials which reflect light; Explain how the eye works; Explain the changes in shadows throughout the day; Explain why things look different in water; Explain how mirrors work*	Living things and their habitats *Classify different animals; Use and design classification keys to sort animals; Classify different plants; Investigate and classify micro-organisms; Describe how Linnaeus classified living things.*		Evolution *Explain adaptations in plants and animals; Explain natural selection; Describe the life and work of Charles Darwin; describe inheritance and genetics; Explain how fossils help us to understand evolution.*	Electricity *Identify electrical components and their symbols; investigate the relationship between voltage and brightness; Compare how components are different; Identify renewable and non-renewable sources of energy.*