Building Science Knowledge at Parkfield EYFS & KS1			
Curriculum Topic	**EYFS**	**Year 1**	**Year 2**
Animals including Humans	**Animals** ✓ There are different types of animals and they live in different places around the world. ✓ All animals need food, water and a home. **Humans** ✓ There are different parts of our body: heads, shoulders, arms, legs, knees, feet and toes. ✓ Facial features: eyes, ears, mouth, nose, hair ✓ There are five different senses which include: sight, hearing, touch, taste and smell. Key Scientist: Chris Packham is a well know naturalist and studies animals and their habitats	**Humans** ✓ Humans are animals ✓ Generally, all humans look different ✓ Our bodies are all different ✓ We have 5 senses – sight, hearing, touch, taste, smell ✓ Our senses work together ✓ Our brain helps us to understand our senses **Animals** ✓ Animals can be grouped in different ways ✓ Animals have different features (e.g. fur, hair, scales) Different animals eat different types of food ✓ Some animals eat other animals ✓ Some animals eat only plants ✓ Some animals eat animals and plants ✓ Animals have to hunt/search for their food ✓ Food gives animals energy Key Scientist: Jane Goodall is a campaigner for the futures of animals, humans and the planet	**Humans** ✓ Humans need the right amount of certain things to remain healthy ✓ All animals have offspring ✓ Some offspring are live born, some hatch from eggs ✓ Animals need certain things in order to grow into healthy adults ✓ All animals need air, water, food and shelter to survive **Bodies** ✓ Our heart beats faster when we exercise ✓ Our heart pumps blood around our bodies to our muscles ✓ There are five food groups (children may name them but this is not essential) ✓ We need food from each of the five groups to be healthy Key Scientist: Maria M Daly discovered how our diet affects our health.
Materials / Uses of everyday materials	**Materials** ✓ A material is what an object is made out of. ✓ Material names: wood, metal, plastic, glass and fabric. ✓ Materials have properties that are suitable for a purpose. i.e waterproof/floating and sinking Key Scientist: Spencer Silver invented the glue for sticky notes	**Materials** ✓ Material names: wood, metal, plastic, glass, fabric ✓ Objects can be made from more than one material ✓ Materials have properties that make them suitable for a specific purpose ✓ Materials can be described by their properties ✓ A property of a material is something we can measure, see or feel – it helps us decide if it is suitable for a purpose Key Scientist: Harry Brearly invented stainless steel.	**Materials** ✓ Everything is made up of materials – some things are made of more than one material ✓ Most materials have more than one property ✓ A property is something we can measure, see or feel ✓ Materials can be natural or man-made (manufactured) ✓ Some (not all) solid materials can be changed by having a force applied to them ✓ Materials are tested to see how suitable they are for a purpose ✓ The properties of a material will determine how suitable it is for a purpose ✓ Objects are chosen for a purpose based on their properties Key Scientist: Ruth Benerito is known for bringing science to clothes and created wrinkle free cotton.
Plants	**Plants** ✓ There are lots of different types of trees and plants. ✓ Some trees lose their leaves. ✓ Plants and trees are living things. ✓ Flowers have a roots, stem, leaves and flowers. ✓ Plants and trees need water to grow Key Scientist: Beatrix Potter is not just an author, she was also a keen botanist and was fascinated by funghi	**Plants** ✓ Different trees produce different shaped leaves ✓ Some trees lose their leaves, others don't ✓ Trees have branches, leaves, roots and a trunk ✓ Leaves catch sunlight to help the plant grow ✓ Flowers and plants are living things ✓ Even though they don't look the same, flowers usually have the same basic parts ✓ Children will have a basic understanding of the name/functions of the flowering plant (e.g. the stem transports water) Key Scientist: Beatrix Potter is not just an author, she was also a keen botanist and was fascinated by funghi	**Plants** ✓ Plants can be classified in more than one way ✓ Plants are living things ✓ Plants growing from bulbs all look different, the bulbs look different too ✓ Plants can grow from seeds or bulbs ✓ Plants need specific conditions to thrive – this is not necessarily the same for all plants ✓ Most plants need water, light and warmth to grow healthily Key Scientist: Jane Colden found and classified as many local American species of plants as she could.
Living things and their habitats	**Animals** ✓ Animals live in different places around the world. ✓ Animals have homes ✓ Different types of homes, e.g. forest, cave, sea, house Key Scientist: Chris Packham is a well know naturalist and studies animals and their habitats		**Living things** ✓ All things fit into 3 categories: alive (living), dead, never been alive ✓ Living things have 7 key characteristics (movement, respiration, sensitivity, nutrition, excretion, respiration, growth) **MRS NERG** **Habitats** ✓ A habitat is where plants and animals live ✓ There are different types of habitats • Animals and plants have characteristics that make them suited to their habitats ✓ A micro-habitat is a smaller area within a larger habitat that has unique conditions suited to its inhabitants ✓ Microhabitats can be found in all habitats ✓ Animals and plants have characteristics that make them suited to a microhabitat **Food chains** ✓ A food chain is where one organism eats another ✓ Animals obtain their food from plants and other animals ✓ Food gives us energy Key Scientist: David Attenborough is a scientist who studies animals and their behaviour.
Seasonal	**Seasons**	**Seasons**	

changes	✓ There are four seasons: Spring, Summer, Autumn, Winter ✓ The weather changes in every season. ✓ What they wear for different seasons ✓ Signs of Spring- new life- lambs, frogspawn and plants, blossom on trees ✓ Signs of summer: Sunshine, greenery, hot ✓ Autumn: leaves falling off trees, turning from green to red ✓ Spiders webs and conkers Key scientist: Al Battani suggested the measurements of the length of the year and the seasons	✓ Each of the 4 seasons are 3 months long: Spring, Summer, Autumn and Winter ✓ The day length in Autumn/Winter is shorter than in Spring/Summer ✓ Winter lasts for 3 months: December, January and February ✓ Day length in Winter is short and the nights are long ✓ The weather in Winter is usually cold ✓ Spring happens in March, April and May in the UK ✓ Day length begins to get longer in Spring ✓ The weather becomes warmer in Spring ✓ There are lots of signs of new life and growth in Spring Key scientist: Al Battani suggested the measurements of the length of the year and the seasons	