London Colney Long Term Subject Plan - Science

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery	The Natural World Use the senses to explore materials. Weather and seasonal changes.	The Natural World Animals and plants. Changes in weather.	The Natural World Talk about cold weather. Simple properties of materials.	The Natural World Signs of spring. Plants growth.	The Natural World Mini beasts and simple habitats. Sorts natural objects and discusses properties.	The Natural World Compares environments. How to care for nature.
Reception	The Natural World Explore signs of autumn.	The Natural World Describe seasonal weather. Describe different materials and their properties. Observe animals in the winter.	The Natural World Signs of winter and early spring. Compare materials in different states.	The Natural World Observe growth and changes. Describe life cycles of familiar animals. How to care for living things.	The Natural World To understand how weather effects the world. What plants need to grow and how to care for them.	The Natural World Explain what they have observed and learned about plants, animals and the seasons. Talk about environmental care.
Year 1	Everyday Materials What are materials? Which materials are different objects made from?	Autumn and Winter What are the four seasons? What is the weather like in autumn?	Amazing Animals Can we name and describe different animals? Can we group animals into mammals, bird and fish? Can we group animals into reptiles and amphibians?		Spring and Summer Can we describe the four seasons? How does the weather change from winter to spring?	Plants What is a plant? What are the main parts of a plant?

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	What are the properties of different materials? What other properties can materials have? Which materials should we use to make objects? Can we use properties to group, compare and sort materials?	What happens to plants and animals in autumn? How does the weather change from autumn to winter? What is the weather like in winter? What happens to animals in winter?	What do mammals have in common? Can we identify different birds? <u>Amazing animals</u> Can we compare different fish? Can we compare animals from different categories? What do animals eat? What makes a good and happy pet? What are the basic parts of the human body? What do they do?		What happens to plants and animals in spring? How does the weather change from spring to summer? What happens to plants and animals in the summer? How do the changing seasons affect humans?	What are some common garden plants? What are some common wild plants? What are the main parts of a tree? Why are plants important?
Year 2	<u>Uses of Material</u> Can we identify the materials that different objects are made from? Can we compare the suitability of different materials? How can the shapes of objects made from some materials be changed?	<u>Animals and Survival</u> What do animals need to survive? Why is exercise important? What is a balanced diet? What is hygiene and why is it important?	<u>Habitats</u> How do we know it's alive? Where do plants live? What animals can we find? What can we find out about the habitats of arctic and Sahara? Who eats who?	<u>Protecting the Environment</u> Can we explain the dangers to the local environment and animals in it? Why is recycling important? How can we be energy efficient with electricity?	<u>Plant and Growth</u> What is a seed? What does a seed need to germinate? What do plants need to grow and survive?	<u>Plant and Growth</u> What is a life cycle of a plant? Can we explain what a life cycle of a plant is? Can we explain what seeds need to germinate and grow?

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	How can we help to stop plastic pollution? How are new materials discovered?		What longer food chains can you find?	Why are trees important?		
Year 3	<u>Skeleton, Muscles and Nutrition</u> What does the human skeleton look like? What is the function of the human skeleton? How do bones and muscles work together? How are skeletons different in animals? <u>Skeletons, Muscles and Nutrition</u> How are skeletons different in animals? What is nutrition and where does it come from? How do different animals get the nutrition they need?		<u>Light and Shadows</u> What is a light source? How can we protect ourselves from the sun? How does light travel? How are shadows formed? What types of material reflect light?	<u>Forces and Magnets</u> What are forces? What is a magnet and how do they behave? Which materials are magnetic?	<u>Rocks and Fossils</u> What are rocks? What are some of the properties of different types of rocks? What are fossils and how are they formed?	<u>Plants-needs for Survival</u> What does a plant need to grow? Why do plants have roots? Why do plants have leaves? What is the life cycle of a flowering plant?
Year 4	<u>Teeth and Digestion</u> What do human teeth look like? Can eating and drinking damage our teeth?	<u>States of Matter</u> What are states of matter? What happens when you freeze liquids?	<u>Living Things and Environments</u> What is a living thing? What is a habitat? What are food chains and food webs? What is a vertebrate? What are classification keys?		<u>Sound</u> What is sound and how is it made? How does sound travel? How do we hear?	<u>Electricity</u> What changes the brightness of a bulb in a circuit? What materials are conductors and

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	Do all animals have the same teeth? What makes up our digestive system? How does our digestive system work?	What happens when you heat solids? What is evaporation? What is a water cycle?	What is a climate change and how can we prevent environmental change?		What changes the volume of sound?	insulators of a circuit?
Year 5	<u>Earth and Space</u> What is the Sun and what is Earth? What is the solar system? Why do we have night and day? What are the phases of the moon?	<u>Forces</u> What are forces? What is gravity? What is friction? What is water resistance?	<u>Materials</u> What is a conductor? How do materials respond to magnets? What factors affect dissolving? How do we separate a mixture using filtration? What are reversible and irreversible changes?	<u>Lifecycles</u> What is a life cycle? How are the life cycles of birds and amphibians different from mammals? What is pollination in the life cycle of a flowering plant? What are the main stages =in the life cycles of insects?		<u>Growing Older</u> What is puberty? What is adolescents? How do adults grow into old age? How do humans change as they grow? How do babies and children develop? What is puberty? How is gestation different for different animals?
Year 6	<u>Light</u>	<u>Classification</u>	<u>Evolution and Inheritance</u> What is evolution? Why do animals become extinct?		<u>Electricity</u>	<u>Circulatory System and Lifestyle</u>

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	What do shadows tell us about light? How do we see? What is reflection? What is refraction? What is light pollution?	How can we classify vertebrate? How can we classify plants? What are microorganisms?	How can we save endangered animals? <u>Evolution and Inheritance</u> How can fossils tell us? What is variation? What is inheritance? What is adaptation?	How do we use electricity? Where do we get electricity from? How do we use circuit diagrams to represent circuits? How can we change circuits?	What is the circulatory system? What does the heart do? What is blood and why is it important? How does exercise effect the body? How do drugs effect the body?