## Kinderscout 23-34 Science Long Term Plan

Science	Animals Including Humans	Use of Everyday Materials	Living Things and their Habitats	Environment	Plants	Scientists and Inventors
Year 2	Autumn (1) 7 weeks	Autumn (2) 8 weeks	Spring (1) 6 weeks	Spring (2) 6 weeks	Summer (1) 6 weeks	Summer (2) 6 weeks
What We Will Learn	Pupils should be taught to: 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.	Pupils should be taught to: 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.	Pupils should be taught to: 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 identify and name a variety of plants and animals in their habitats, including microhabitats; 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.	Pupils should be taught to: Discuss the vocabulary used in climate change. Measure the melting of ice in a comparative test. Sort items for recycling based on their materials. Suggest ways we can reduce, reuse and recycle. Take surveys and use the information to help answer a question. Record how much water I waste when I wash my hands.	Pupils should be taught to: 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.	Pupils should be taught to:  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; find out and describe how plants need water, light and a suitable temperature to grow and stay healthy; describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene; 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 about people who have developed new materials (non-statutory).
What We Will Do	Pupils will say which animal some babies will grow into. Name some animal babies. Say the three things that humans need, to stay alive. Generate questions about a pet they have chosen. Give examples of healthy and less healthy food. Name some things that humans do to keep themselves clean. Use a magnifying glass or microscope to look closely at their hands. Attempt to record what they see.	Pupils will Identify and name everyday materials. Identify different uses of everyday materials. Record their observations. Demonstrate and explain how shapes of objects made from some materials can be changed. Explain what recycling means.	Pupils will say what is different about things that are living, dead or have never been alive. Identify some of the plants and animals in a familiar habitat. Sort objects into categories. They will find microhabitats. Describe the conditions in a habitat. Ask questions about different habitats. Describe the characteristics of some plants and animals. Name some sources of food.	Set up a simple test. Measure and record the time taken for ice to melt. Sort objects into groups. Generate questions about the rainforest. Sort rainforest animals into groups. Ask questions about endangered animals.	Pupils will look closely at plants and trees. Record what they see by drawing or writing. Follow instructions to plant a seed and a bulb. Order the life cycle of a plant. Suggest how to care for a plant so it grows well. Give examples of food crops. Explain that plants are living things.	Pupils will link to prior learning they will describe things plants need; construct a mini greenhouse with a partner; observe how plants grow; discuss whether doctors are scientists; describe when and why we should wash our hands; take part in an activity to show how germs spread; give a minimum of two facts about Charles Macintosh; identify Charles Macintosh's famous invention; give facts about Rachel Carson; take part in an investigation to prove what Rachel Carson found out about water pollution; answer questions about where our energy comes from
Skills Learned	Pupils will be able to observe and measure, how different animals, including humans grow. They will ask questions and suggest ways to find answers to their questions.	Pupils will be able to compare the uses of everyday materials, Through observing closely, identifying and classifying the uses of different materials, and recording their observations.	Pupils will be able to observe sorting and classifying things according to whether they are living, dead or were never alive, they will record their findings using charts.	Pupils will be able to observe and measure, change in an experiment. They will ask questions and suggest ways to find answers to their questions and be able to record their data.	Pupils will be able to sort observe and record, with some accuracy, the growth of a variety of plants as they change over time. They will observe similar plants at different stages of growth; setting up a comparative test.	Pupils will use a variety of skills to be able to draw on conclusions, they will observe changes in patterns and be able to presenting their findings.