Croftlands Infant School Science Curriculum Map 2023/24

Science Long Term Plan		
Year 1		
Term 1	**Term 2**	**Term 3**
Animals including humans Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals Identify and name a variety of common animals that are carnivores, herbivores and omnivores Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. **Investigation** How does my height change throughout the year? Is the oldest child in the class the tallest? Does your sense of smell get better the older you are? **Seasonal Changes-** Autumn Observe changes across the four seasons Observe and describe weather associated with the seasons and how day length varies. **Working Scientifically** To ask questions about the world around them To look at scientific observations and begin to think about what answers they may suggest To identify features of living things with support.	**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. **Investigation**- Waterproof investigation. Which material is most suitable for a tent cover or umbrella. **Seasonal Changes-** Spring Observe changes across the four seasons. Observe and describe weather associated with the seasons and how day length varies **Investigation** Do bigger plants have bigger leaves? **Working Scientifically** To ask questions about the world around them ✓ To identify features of a living thing. ✓ To look at scientific observations and begin to think about what answers they may suggest **Sustainability: Caring for the planet** Understand why it is important to care for our planet. Recognise different ways that we can are for our planet.	**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. (Plant a marigold or nasturtium). **Investigation** Do plants need soil to grow? Do trees with bigger leaves lose their leaves first in Autumn? **Seasonal Changes-** Summer Observe changes across the four seasons Observe and describe weather associated with the seasons and how day length varies. **Working Scientifically** To use simple equipment to carry out a test with support (stopwatches). To carry out simple tests that have been set up with help. To use structured templates and frames to record investigation data and observations in a logical format. To explain, with help, why data needs to be captured accurately To look at observations and begin to think about what answers they may suggest. To use simple equipment (pipette), to carry out a test with support. (WS) ✓ To look at observations and, with support, begin to think about what answers

Year 2		
Term 1	**Term 2**	**Term 3**
Animals including Humans Recognise the stages of a human's life cycle. -Know what humansneed to survive, -Understand the need for exercise and hygiene. -Scientific enquiry- the effect of exercise on our heart rate. To notice that animals, including humans, have offspring which grow into adults -To find out about and describe the basic needsof animals including humans, for survival (water, food and air) - To describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. **Investigation** How much food and drink do I have in a day? Which class wash their hands the most in a day? **Sustainability: Plastic** Understand that: - Plastic can be helpful. - Plastic can be harmful for humans and other animals. - Some plastic can be recycled. - Some plastic cannot be recycled. **Working Scientifically** To use a variety of simple equipment to carry out a structured tests with greater independence and accuracy ✓ To understand that observations might provide evidence or information to help answer a question. ✓ To review data captured in an investigation	**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 to and describe how different habitats provide for the basic needs of different kinds of animals and plants and how they depend on each other. -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. -Identity and name a variety of plants and animals in their habitats, including microhabitats. **Investigation-** - How does the wild area change throughout the year? **Sustainability: Wildlife** - What does wildlife do for us? - What can we do for wildlife?	**Uses of everyday 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. - To find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. **Investigation** Which 3 materials are the most important for a tent cover? Which paper will be the best for mopping up the spillage? How can we make the fabrics waterproof? **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 **Investigation** What happens to my plant if one factor is removed. 4 plants – see what happens to them. One with sunlight and water, one with sunlight and no water, one with water and no sunlight, one with no sunlight or water. **Working Scientifically** To ask questions when exploring the world around them. ✓ To use a variety of simple equipment to carry out a structured test ✓ To carry out tests with increasing confidence and accuracy ✓ To understand that observations might provide evidence or information to

and with some support can use it to answer simple related questions		help answer a question. ✓ To review data captured in an investigation and with some support can use it to

	answer simple related questions ✓ To use scientific terminology. ✓ To group and sort materials referring to some of their simple features To ask questions about things to find out and realise there may be different ways to answer the question ✓ To carry out tests with increasing confidence and accuracy ✓ To use thermometers with support. ✓ To use everyday units of measurement to record data, with support. ✓ To understand that some investigations happen over a longer period of time, but the data needs to be captured in the same way ✓ To understand, with support, that scientific observations might provide evidence or information to help answer a question	