allangels' primaryfederation
Clover Hill V.A. Infant & Nursery School
& St. Michael's V.A. Junior School,
Bowthorpe, Norwich

Science Long Term Plan

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery	**Materials** • Observe changes through cooking and exploration of difference materials e.g. adding water to sand or flour. **Body and Senses** • Identify key senses of the human body. • Describe what senses can help us to do. • Name which parts of the body are linked by sense.	**Birds** • Explore where birds live and what they need to survive **light and dark** • Explore light and dark through story and use of torches, light up toys, dark dens, shadow puppets.	**Materials** • Follow verbal instructions to make a mixture • Describe the changes the batter mix goes through as it starts to cook Discover how to make the perfect sandcastle. **Forces** • Explore push and pull • Identify if an action is a push or a pull.	**Food** • Learn where eggs and Milk come from • Learn how bread is made through story and cooking	**Life Cycles** • Identify that animals are living things. • Learn about insects and invertebrates. • Discover where insects and invertebrates live. • Name stages of a lifecycle for frog and butterfly.	**Plants and Growing** • Discover that plants are living things. • Learn about plants and where they come from. • Explore how to look after plants **Food** • Explore a range of fresh fruits and vegetables. • Name a variety of fruit and vegetables.

						• Identify if a fruit tastes bitter or sweet
Continuous provision	Available for child initiated exploration throughout the year: Sand, gloop, water, magnets, push and pull toys, ramps and vehicles, bug finders, magnifying glasses, building materials etc Weather is explored each term, discussing seasonal changes and outdoor learning					
	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Reception	**Our Body** • Explore our similarities and differences and how we are all unique • Discover how our bodies change.	**Materials** • Discover that some things can change shape. • Learn about different materials through exploration.	**Weather and Seasons** • Learn about rain, ice, and water. • Explore snow and melting • Discover how rainbows are formed. • Explain what happens during each season Describe what clothes you might need for each season.	**Food** • Learn about your diet and how to stay healthy • Understand which vegetables grow overground or underground • Name several types of vegetables • Identify three different types of vegetable. • Understand how milk can be used to keep us healthy Explain what a cow produces. Explain where milk comes from.	**Animals and Plants** • Discover where animals live and what they need to survive • Explain why birds need to live in a nest. • Know the types of food birds feed on • Identify birds based on their features. • Explain how some products can be produced by an animal. • Know which animals live on a farm.	**Floating and sinking** • Group objects based on whether they sink or float • Explain what sink means • Explain what float means

					• Learn about the dinosaurs that lived on Earth	
	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Year 1	**All About Me** • Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.	**Exploring Everyday Materials** • Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock. • Describe the simple physical properties of a variety of everyday materials. • Distinguish between an object and the material it is made from.	**Everyday Materials- Building** • Compare and group together a variety of everyday materials on the basis of their simple physical properties.	**All About Animals** • Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. • Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets. • Identify and name a variety of common animals that are carnivores,	**Plants** • Become familiar with common names of flowers and plant structures including seeds. • Identify and describe the basic structure of a variety of common flowering plants, including trees. • Identify and name a variety of common wild and garden plants. • Identify and name a variety of deciduous and evergreen trees. • Observe the growth of planted flowers	**Seasonal Changes** • Observe changes across the four seasons Observe and describe weather associated with the seasons and how day length varies.

				herbivores and omnivores.	Become familiar with plant structures Keep records of how plants change over time.	
	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Year 2	**Animals including Humans- Growth** • 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.	**Animals including Humans- Life Cycles** • Notice that animals, including humans, have offspring which grow into adult.	**Living things and Habitats** • Explore and compare the differences between things that are living, dead, and things that have never been alive. • 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. • Identify and name different sources of food	**Living things and Habitats- living things around the world** • 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.	**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. • Understand the requirements of plants for germination, growth and survival, as well as, the processes of reproduction and growth in plants.	**Using Everyday Materials** • Identify and compare the suitability of a variety of everyday materials. • Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.