St John's C of E Infant School
Knowledge, Skills and Vocabulary Progression Map
Science

	EYFS	*Year 1*	*Year 2*
Skills to work Scientifically	Talk about their own ideas. Begin to test their own ideas. Question why things happen. Begin to use science vocabulary. Use equipment and tools safely. Talk about plants, animals, natural and found objects. Create simple representations of people and objects. Use senses and look closely. Notice similarities and differences.	Ask simple questions in response to the teacher. Understand and use the question words what, why, where, when and how with support. Make observations using appropriate senses. Test ideas suggested to them and begin to make own suggestions. Say what has happened in a test/enquiry. Make simple comparisons and groupings. Say whether what has happened was what they expected. Draw and label simple pictures. Use simple charts to communicate findings. Communicate observations orally and simple writing e.g. stem sentences.	Ask their own questions. Independently understand and use the question words what, why, where, when and how. Use simple equipment to aid observations. Compare and contrast observations. Begin to recognise when a test or comparison is unfair. Design a test to answer their own questions. Say what their observations from an enquiry show. Begin to draw simple conclusions from their enquiry. Begin to suggest improvements in their work. Collect and record data (supported by teacher). Suggest how enquiry data could be collected to answer questions. Begin to plan and choose their own equipment.
Key vocab	**Test** **What** **Why**	**Investigate** **What** **Why** **How**	**Experiment** **What, why, how, because** **"I know" and" I think"**
Nature and living things	**Plants, Animals and Seasonal Changes:** **Knowledge-**	**Plants:** **Knowledge**- Know names of a variety of common wild and garden plants, including deciduous and evergreen trees.	**Plants:** To know that seeds and bulbs grow into mature plants.

	Know about similarities and differences in relation to places, objects, materials and living things. To know about a simple life cycle. **Skill-** Talk about the features of their own immediate environment and how environments might vary from one another. Make observations of animals and plants and explain why some things occur and talk about changes. Make observations of plants that they have planted themselves.	To know the parts of plants and trees. **Skill-** Identify and name a variety of common Identify and describe the basic structure of a variety of common flowering plants, including trees. **Animals Including Humans:** **Knowledge-** To know the names of a variety of common animals including fish, amphibians, reptiles, birds and mammals. To know names of animals that are carnivores, herbivores and omnivores. To know the basic parts of the human body. To Know which part of the body is associated with each sense. **Skill**- 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. **Seasonal Changes:** **Knowledge**- Name the seasons and associated weather types. **Skill-** Observe changes across the 4 seasons.	Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. **Skill-**Observe and describe how seeds and bulbs grow into mature plants. **Animals Including Humans:** **Knowledge-** To know that animals, including humans, have offspring which grow into adults. To know that animals and humans all have basic needs. To know what humans, need for a healthy lifestyle. **Skills-** 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. **Living Things and Their Habitats:** **Knowledge-** To know that things can be living, dead and never been alive. To know how habitats, provide basic needs for animals including food that they eat and that this creates a food chain. To know and name a variety of plants and animals in their habitats, including microhabitats.

		Observe and describe weather associated with the seasons and how day length varies.	**Skill-** Investigate 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.
Materials	**Materials:** **Knowledge-** Know about similarities and differences in relation to places, objects, materials and living things. To know that matter can change state due to temperature. **Skill-** Talk about the features of their own immediate environment and how environments might vary from one another. Observe changing states of matter e.g. water freezing.	**Everyday Materials:** **Knowledge-** To know the names of different common materials. To know the properties of different materials. **Skill-** Distinguish between an object and the material from which it is made. 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. Compare and group together a variety of everyday materials on the basis of their simple physical properties.	**Uses of Everyday Materials:** **Knowledge-** To know that different materials are suited to different uses. To know that some materials can be changed by squashing, bending, twisting and stretching. **Skill**- 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.

When I am a scientist I can …..	• Explore the natural world around me, making observations and draw pictures of animals and plants. • I will know some similarities and differences between the natural world around me and contrasting environments, drawing on my experiences and what has been read in class. • I will understand some important processes and changes in the natural world around me, including the seasons and changing states of matter.	• Observe and talk about changes in the weather and the seasons. • Explore, name, discuss, raise and answer questions about everyday materials so that I become familiar with the names of materials and properties as well as performing tests, pairing and grouping them. • Identify and name plants and flowers and their structures. • Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals and name herbivores, carnivores and omnivores.	• Use appropriate scientific language from the national curriculum. • ask my own questions about what I notice • use different types of scientific enquiry to gather and record data • use simple equipment where appropriate, to answer questions. • Recognise the need for a fair test