EYFS Curriculum Progression

Understanding the World – Science

In Early Years understanding the world through science is an important part of our curriculum. It allows the children to explore and experiment using a range of materials and resources. We encourage the investigation of the world around us. We provide the opportunities to develop and extend skills and an opportunity to express their individual interests, thoughts and ideas. Teaching in the Early Years Foundation Stage is underpinned by the Characteristics of Effective Learning.

Science in Early Years is very exploratory. We aim for activities based around science to be fun and inspiring. We engage our children through experiments allowing opportunities to plan and carry out ideas, predictions and reflections. Science allows our children to explore why things happen and how things work through observation, exploration and technology. Science is planned in-line with the development matters statements and our focus is to promote critical thinking and problem solving.

Alongside planned learning, children are encouraged to follow their own interests and create ideas around their own fascinations.

Implementation:	**Learning experiences**	**Key vocabulary & what children need to know**	**Outcomes**
Caterpillars Nursery 2 year old Provision	Provide visual aids and resources such as books, small world and investigative toys. During group times or activities talk about things they see in their environment. Encourage children to explore small world, and investigative toys. Cooking/baking activities. Dinosaurs and animals, natural objects. Talk about what we have seen, made, noticed.	Questions: What? Where? Who? See, notice, find, look, look closely, lift, press, tap, push, pull, twist, up, down, open, shut/close, mix, stir, add, mould, shape, same, different,	Explore materials with different properties. Explore natural materials, indoors and outside. Explore and respond to different natural phenomena in their setting

Butterflies Preschool provision	Talking about the natural world, providing natural objects such as stones, shells, leaves, sticks, pine cones. Books and toys on subjects such as: Dinosaurs/animals/space/plants/human body… Planting activities, life cycle studies, scientific experiments (for example egg in vinegar, milk and food colouring…) Forest school sessions. Talk about what has happened, how, why? Encourage children to ask appropriate questions and explore and/or record findings.	Ask and answer questions: What? Where? Who? How? When? Why? Because… See, notice, find, look, look closely, lift, press, tap, push, pull, twist, up, down, open, shut/close, mix, stir, add, mould, shape, same, different, changes, growing, living, caring, describe, ingredients. Able to name items/animals/plants/ingredients.	Use all their senses in hands-on exploration of natural materials. Explore collections of materials with similar and/or different properties. Talk about what they see, using a wide vocabulary. Explore how things work. Plant seeds and care for growing plants. Understand the key features of the life cycle of a plant and an animal. Begin to understand the need to respect and care for the natural environment and all living things. Explore and talk about different forces they can feel. Talk about the differences between materials and changes they notice

<u>Holly Class</u> Reception	Encourage talking about how things change over time and why. Books and visual aids provided to develop understanding of natural changes. Toys and resources linked to threshold concepts in science support the observation skills. e.g Light box, magnifying glasses, rocks, shells fossils, magnets, circuits and loose parts. Children are encouraged to observe each stage of changes during experiments/activities and are provided with a rich vocabulary in order to discuss scientific threshold concepts. Activities are planned around life cycles, planting, baking, space. Forest School plans for exploration of the natural world, looking for similarities and differences and spotting changes in the seasons. Children are asked to explain findings, and explain why things occur and how changes happen. Investigations based around plants, changing materials and seasons are planned for.	Questions: What? Where? Who? How? When? Why? Because… See, notice, find, look, look closely, lift, press, tap, push, pull, twist, up, down, open, shut/close, mix, stir, add, mould, shape, same, different, similar, like, Describe, explain,	Explore the natural world around them. Describe what they see, hear and feel whilst outside. Understand the effect of changing seasons on the natural world around them. **Early Learning Goal** **Explore the natural world around them, making observations and drawing pictures of animals and plants.** **Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class.** **Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.**