



Subject Specific Action Plan 2021-2023

Subject: Science	Subject lead : Amy Walduck	
<p>Priority one</p> <p>Embed scheme of work in science across key stages.</p>	<p>Action(s):</p> <p>Research at least different schemes. Read and ask on sciences forums which is the best one to use.</p> <p>Download free documents for example.</p>	<p>Success Criteria:</p> <p>New scheme in place for EYFS and KS1. All staff using it.</p> <p>We have begun using PLAN for Nursery to Year 2. The staff have found it useful to support prior, future learning and evidence.</p> <p>April 2022</p>
<p>Priority two</p> <p>To ensure that science resources are being used appropriately in lessons</p>	<p>Science resources are audited and stored and labelled appropriately. Teachers to have an understanding of the appropriate resources for each level of development. There are planned opportunities for children to use science resources. Children are able to explain what equipment they have used in lessons and how it helped them with their learning. Borrow kits-resources -Microscope Activity Kit.</p>	<p>New science resources ordered in summer 2021 (e.g. microscopes, magnifying glasses, torches, binoculars, etc.)</p> <p>Summer 2021</p>
<p>To develop children’s natural curiosity and inquisitiveness about the world, raising the profile of Science (CULTURAL CAPITAL)</p>	<p>Children are given the opportunity to ask questions about the world around them. Children are able to ask appropriate questions about scientific phenomena during lessons. Children are able to answer some of these questions following science units of work.</p>	<p>New science resources ordered in summer 2020 (e.g. microscopes, magnifying glasses, torches, binoculars, etc.) Example experiments Key ‘I wonder’ questions.</p> <p>Professor Bubbleworks workshop – May 2022</p>

	Science after-school club. Involving the community and parents. School trips.	CPD course October 2022
Priority three To provide teachers with science CPD opportunities	Teachers are confident in teaching and assessing science. Teachers have a good understanding of how best to support children in their acquisition of scientific skills and knowledge. The quality of teaching and learning in science improves as a result of teachers improved subject knowledge.	Outside science CPD company New scheme embedded New science resources ordered in summer 2021 (e.g. microscopes, magnifying glasses, torches, binoculars, etc.) Science books (Library) ICT resources e.g. video clips Investigation packs / resources CPD course October 2022
Priority four Introduce STEM termly activities – Whole School or Year groups and SCIENCE WEEK	Whole school to be involved in STEM activities and Science week. Led by the Science coordinator.	STEM is important because it pervades every part of our lives. Science is everywhere in the world around us. Technology is continuously expanding into every aspect of our lives. Science experiment using sunflowers- March 2022-July 2022
Priority five Ensure Pre and Post assessment checklist are being used when beginning new area of learning (Topic)	These grids provide three columns for the children to use. Ideas are divided into “What I know”, “what I want to know” and “what I have learned”. To be used to inform planning and assessment for progression across the topics.	Teachers feel more confident in the assessment, planning, and delivery of science. ONGOING
To observe science in KS1 and EYFS		
<p>Intent <i>“The important thing is to not stop questioning. Curiosity has its own reason for existing.”</i> Albert Einstein</p> <p>At Croftlands Infant & Nursery school our aim is to provide a science curriculum that engages and inspires children to explore the world around them. Through exciting, stimulating and challenging practical experiences we aim to spark their curiosity and inspire them to want to find out more.</p>		

Embedded within our curriculum is the belief that curiosity has led to great advances in science and that it is also the key to successful scientific education. Our children are encouraged to question, investigate and explore the world around them. We believe that these opportunities will ensure that our children are confident, life-long learners who will develop an appreciation of the beauty and wonder of science and have a deeper understanding of the world we live in.

Implementation

- Our main science teaching with Key Stage 1 is 'blocked' with a teacher who is solely responsible for planning, delivering and assessing this subject. This allows the children the time to focus in depth upon concepts.
- Understanding of the world in EYFS is taught mainly through topic work.
- The children are taught to plan their own investigations using the change/measure/same method with a view to this being used independently by the end of Year Two.
- Science takes place outdoors as much as possible so that children have first-hand experience of the environment they are learning about.
- Children are encouraged to generate their own questions and taught that this is the first step towards all great scientific discoveries. Throughout all lessons questioning is an important tool to establish understanding and encourage deeper thinking.

Impact

Our 'hands on' approach to science leads to engaged learners and children who can operate as scientists.

Our approach to science allows children to think about concepts in depth and revisit to build on knowledge gained throughout EYFS & KS1.

Our children become confident using scientific terminology and applying concepts that they have learned. Throughout their science education the children are exposed to many memorable experiences which help to embed their learning and create a desire to learn more, thus planting the seed to become life-long learners in this subject.