



Knowledge is Power...

IVINGTON CE PRIMARY AND PRE-SCHOOL SUBJECT REPORT

Reaching together... stand firm in your faith, be courageous and strong - 1 Corinthians 16:13



Science Subject Report

INTENT

At Ivington Primary and Pre-school we believe a high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils are encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They are encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes. We aim to provide a curriculum that will instil a thirst for knowledge and love of learning with a keenness for enquiry and asking questions. At Ivington Primary and Pre-school the science curriculum we offer is progressive, building on children's prior knowledge and enabling a strong foundation for future learning. We aim to teach in revisited topics that allow children to review and evaluate their own learning. We intend to develop their scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics. We want to develop their understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them. We endeavour to equip our pupils with the scientific knowledge required to understand the uses and implications of science, today and for the future.

IMPLEMENTATION

We cover the 2014 National Curriculum in a progressive, cyclic programme. Lessons are taught weekly, with a focus on 'working scientifically' the children are encouraged to ask questions and make links with previous learning in order to create a deeper understanding. Teachers use the correct scientific terms and key vocabulary is displayed and used continually by pupils. Pupils are assisted in making their thinking clear, both to themselves and others, and teachers ensure that pupils build secure foundations by using discussion to probe and remedy their misconceptions. We value individuality and the needs of all our children therefore we ensure learning opportunities are suitable to individual needs. In EYFS Science is covered through activities linked to 'Understanding of the World'. Equipment is used sensibly and responsibly.

Working closely with local schools we have established science days, events, fayres and exhibitions, which promotes science understanding and inspires children's learning. We have excellent resources in school and access to a wide variety of loan boxes through our local partnership which the children use on a variety of occasions. We have regular science days and weeks of further enrichment, where we have employed others to widen our mind-sets and deepen our understanding. The links we have with the local primary schools further stimulates and enthuses science learning.

What a Science lesson looks like in our school:

- A variety of activities which take place inside and outside of the classroom to engage children about the world around them.
- Investigations/practical exploration with the children being able to plan, record, carry out and conclude their learning.
- Opportunities to work individually, in pairs or groups.

- A range of scientific resources to enable the children to carry out engaging experiments.
- Subject specific vocabulary which is focused upon within the first session of each topic and is then embedded within each lesson.
- Different aspect of Science are focused upon such as Biology, Chemistry or Physics
- Use of a range of media where possible to help the children to learn about a modern world.

IMPACT

At Ivington Primary and Pre-school our Science Curriculum is high quality, well thought out and is planned to demonstrate progression. Most children are deemed to be making good or better progress. We have developed a tracking system where teachers can record and monitor individuals learning in order to ensure their planning is relevant and accessible. Through pupil voice activities and questionnaires the children's love of science and their positive learning situations, show how successful science is here.

Positive areas for the subject. (What is working well in our school?) All staff have a very secure understanding of the Science curriculum and endeavour to teach high quality science lessons. We are able to develop our curriculum extensively because our children are encouraged to be curious and ask questions. This means their motivation and enthusiasm for science is infectious.

EVALUATING IMPACT ON LEARNING, SEPTEMBER 2022-2023

INTENT	IMPLEMENTATION	IMPACT
To raise attainment in science.	Every lesson included opportunities to revisit substantive knowledge and disciplinary skills.	Outcomes at the end of KS2 show 83% of pupils attaining the expected standard.
To ensure high quality of Teaching and Learning in Science.	Learning walks evaluate the lesson content and outcomes.	High quality, engaging lessons observed throughout the school.
To enhance assessment opportunities.	Assessment opportunities CPD given by Science lead.	Teachers use a wide range of assessment resources to ensure accurate assessment.

FOCUS FOR LEARNING, SEPTEMBER 2023-2024

INTENTS	IMPLEMENTATION	IMPACT
To enable children to identify the five enquiry types.	The five enquiry types are displayed in classrooms and referred to during teaching.	
To ensure balanced coverage of the five enquiry types.	Teachers track the curriculum coverage of the five enquiry types across the year.	
To ensure teachers are knowledgeable about the science curriculum.		

SEND Provision in Science at Ivington C.E. Primary School

Individual

All of the below.

Consider physical barriers,
sensory breaks, behavior
charts, pencil grips,
balance boards, etc. Use of

Targeted

All of the below.

Recap previous lessons, vocabulary input, pre-learning of
new vocabulary, differentiated work, SEND supported
plans that are targeted, potential barriers explored

Universal

Access to the curriculum, questioning, key vocabulary lists/word banks,
knowledge organisers, class displays, age-appropriate planning and expectations,
prompts from the teacher, differentiate work where appropriate.