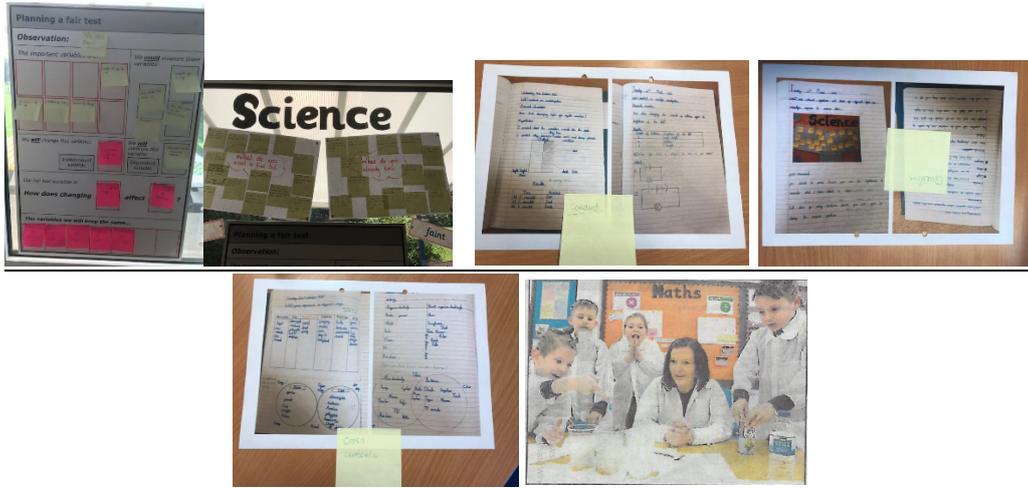


Child Led Science at Icen Academy



Science is all around us! At Icen Academy we believe that scientific investigation is one of the most powerful ways to learn; developing curiosity and perseverance as well as challenging what we know about the world. As a school, we aim to develop children's curiosity, interest and concern with the outside world. We endeavour to achieve this through our engaging child-led practical approach to teaching science which enables children to have a greater understanding of our world through practical, enriching activities and observations.

Aims

This year at Icen Academy, improving children's scientific skills, as well as their enjoyment of science, has been a major focus. We believe that Science skills are a key factor in enabling children to become confident, creative and independent learners and thinkers. It also enables children to prepare for the experiences they will face in the world outside of education and learning. Through science, we believe that children should develop an excitement and curiosity about the world around them and have the opportunity to raise their own questions. To achieve this, at the beginning of each topic we provide children with the opportunity to raise their own questions to plan their own investigations and pursue their own lines of enquiry. Through ensuring children are active within planning processes, we also aim to identify their prior knowledge and curiosity to meet the needs of each child. In turn, this will enable them to reach their full potential and to engender a sense of awe and wonder with Science and develop their curiosity.

Working Scientifically

From a young age, the children will gradually acquire the skills of working scientifically through: questioning, predicting, observing, comparing, classifying, estimating, measuring, exploring, testing communicating results and interrupting patterns. The types of scientific enquiry will include: observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing. Through our child-led practical approach to teaching science, it is our aim that children will develop a set of attitudes which will promote scientific thinking, including open-ended questioning, perseverance, objectivity and recognition of the importance of teamwork.

It is our aim at Icen Academy that by the end of **Key Stage 2** the children will come to understand the nature of 'scientific method' involving: meticulous observation, the making and testing of hypotheses, the design of fair experiments, the drawing of meaningful conclusions through critical

reasoning and the evaluating of evidence. It is our hope that they will become effective communicators of scientific ideas, facts and data and begin to build up a body of scientific knowledge and understanding, which will act as a foundation for future enquiry.

Science Day

To celebrate our practical child-led approach to teaching, we planned a whole school Science day which involved pupils enjoying a range of practical scientific investigations. Throughout the morning the pupils, dressed in the school's new labcoats, planned and conducted a range of engaging experiments. In the afternoon, parents were invited into school to observe demonstrations by pupils, participate in conducting experiments and learn the science behind the investigations.

Cross curricular Science

In line with our curriculum, Science is linked with our creative curriculum approach. Science is carried out as part of an integrated unit where children will be applying a range of knowledge and skills from different subject areas to pursue a key line of enquiry. This will help to make the children's science more meaningful and will therefore enhance their learning. At Iceni we aim to have strong cross-curricular links, especially with ICT, Maths and English. Mathematical skills very often link naturally, in terms of measurement and recording. Much of the work will be tackled collaboratively and the subsequent interactions will enhance language skills. English and writing skills will complement the Science curriculum as child report their learning to others in a variety of forms, either in a written form or orally. We also aim for the children to be familiar with, and use, technical terminology accurately. Whenever possible, Science lessons are delivered beyond the classroom. Our aim is to nurture creativity and imagination and develop interest in the environment and wider world.

Quotes

'I enjoy science because we get to make cool awesome stuff and we don't get bored. I love making inventions!'

'I love science because we get to share our ideas and put it together to make cool projects. I love planning and doing our own experiments (dancing popcorn)'

'The planning sheet can help me to plan experiments and think of the variables and working with other people in a group because we can learn from each other'

'In science lessons, the post it planning sheets helps us to plan a fair test, choose variables and make predictions before we do our experiments'

'I have improved in Science because I can now plan my own experiments with the planning sheet and I think I've got better at thinking of different variables and making predictions'

'A variable is something that you can change or keep the same (i.e. time/ size/ colour/ shape)'