Walkeringham Primary School
Science Curriculum

Intent

Our science curriculum is designed with our children at its centre.
We want our children to develop their:

Knowledge

Our curriculum is found upon the key scientific knowledge informed by the national curriculum. Through our curriculum, these areas are revisited and developed allowing children to gain coherent knowledge and understanding. The curriculum is designed to ensure that children are able to acquire key scientific knowledge through practical experiences; using equipment, conducting experiments, building arguments and explaining concepts confidently.

Skills

At Walkeringham Primary School, our science curriculum enables children to become enquiry-based learners. We aim to create a fun and stimulating approach to science lessons stimulating children's natural *curiosity*. We achieve this through a hands-on, challenging curriculum which develops this *curiosity* by asking scientific questions, develops *resilience* by the use of challenging opened ended questions, develops *responsibility* by encouraging children to working practically, develops *independence* by promoting investigating, evaluating, making choices and using scientific vocabulary.

Implementation

At Walkeringham we use 'Learning Challenge Curriculum' by Focus Education to ensure full Science curriculum coverage. Our curriculum is child focused requiring deep thinking. All pupils are encouraged to work using a question as the starting point, considering different perspectives and possibilities to explore. They do this exploration through talking about, testing and developing ideas about everyday phenomena and the relationships between living things and familiar environments, and by beginning to develop their ideas about functions, relationships and interactions. They ask their own questions about what they observe and make some decisions about which types of scientific enquiry are likely to be the best ways of answering them, including observing changes over time, noticing patterns, grouping and classifying things, carrying out simple comparative and fair tests and finding things out using secondary sources of information. They draw simple conclusions and use scientific language to talk and write about what they have found out.

Key knowledge and skills have been identified for each unit to provide progressive acquisition of knowledge. This is supported by the use of 'sticky knowledge' and 'key vocabulary' which are displayed on subject specific knowledge mats. This enables children to readily apply knowledge and vocabulary to their written, mathematical and verbal communication of scientific skills.

Impact

- Children enjoy weekly fun interactive science lessons
- Children are confident using and explaining subject specific scientific vocabulary

- Children can ask scientifically relevant questions about their learning, discuss connections with prior knowledge and confidently discuss their current unit knowledge
- There is a clear progression of children's work and teachers' expectations
- Children become increasingly independent in science, and complete pupil led investigations
- Children complete pre learning knowledge assessments to highlight prior learning and address any misconceptions
- Children complete TAPS summative assessments (when relevant) where scientific knowledge, skills and enquiry and at the forefront ensuring learning barriers such as writing skills are not a barrier in achieving highly