



PJS Science Curriculum

Intent:

At Perryfields Junior School, in conjunction with the aims of the National Curriculum, our Science teaching ensures that it:

- Develops scientific knowledge and conceptual understanding to help them understand the world around them now and in the future
- Ask and answer questions about the world around them through scientific enquiry
- Be enthusiastic and develop a naturally curious child who has a thirst for knowledge/ enquiry
- All children achieve more through successful differentiation within lessons to support and challenge individuals
- Enhance pupil's cultural capital through making links to everyday life where possible
- Explore possible answers independently and communicate their ideas effectively using specialist vocabulary
- Deepen their understanding further through an ambitious curriculum that has clear structure and sequence in how knowledge and skills build for future learning

Implementation:

Teachers create a positive attitude to science learning within their classrooms and reinforce an expectation that all children are capable of achieving high standards in science. Our whole school approach to the teaching and learning of science involves the following:

- Science is taught throughout the year for 2 hours each week.
- Science lessons follow a 6-part lesson structure which enables pupils to deepen knowledge and understanding
- Through our clear planning, we involve opportunities for scientific enquiry in most lessons allowing pupils to find out for themselves – they become more independent learners.
- Children are encouraged to ask their own questions and be given opportunities to use their scientific skills and research to discover the answers
- Planning involves teachers creating engaging lessons, involving high-quality resources to aid understanding of conceptual knowledge
- Teachers use precise questioning in class to test conceptual knowledge and skills, and assess children regularly to identify those children with gaps in learning, so that all children keep up
- Teachers demonstrate how to use scientific equipment, and model Working Scientifically skills in order to embed scientific understanding.

- Teachers find opportunities to develop children's understanding of their surroundings by accessing outdoor learning and workshops with experts.
- Working Scientifically skills are embedded into lessons to ensure these skills are being developed throughout the children's school career and new vocabulary and challenging concepts are introduced through direct teaching
- Enrichment days offer additional science knowledge and understanding and make a link between science and the real world.
- High quality AFL used in all lessons to support and challenge pupil's knowledge and understanding
- Children are given opportunities to reflect and build on prior/previous knowledge and link ideas together through continuous revisiting of knowledge and skills (Do Nows/ Knowledge Organisers)

Impact:

- Most children **will** achieve age related expectations in Science at the end of their cohort year.
- Children have a love of science and enjoy learning about the world around them
- Children will retain knowledge that is pertinent to Science with a real-life context.
- Children will be able to question ideas and reflect on knowledge.
- Children will work collaboratively and practically to investigate and experiment.
- Children will be able to explain the process they have taken and be able to reason scientifically.