Nurture | Grow | Succeed

Science Guidance September 2025

Intent

At Parklands Primary School, our Science curriculum aims to engage and give children an opportunity to experience awe and wonder within science and to want to be curious about the world around them. We want them to make sense of the world by using scientific enquiry skills. Concepts taught should be reinforced by focusing on the key features of scientific enquiry, so that pupils learn to use a variety of approaches to answer relevant scientific questions. Alongside developing their scientific skills, pupils will develop a strong sense of how science shapes many everyday things and how Science and STEM will impact on their future.

Implementation

In ensuring high standards of teaching and learning in science, we implement a curriculum that is progressive throughout the whole school.
Planning for science is a process in which all teachers are involved to ensure that the school gives full coverage of, 'The National Curriculum Programmes of Study for Science 2014' and, 'Understanding of the World' in the Early Years Foundation Stage. Science teaching at Parklands Primary School involves adapting and extending the curriculum to match all pupils' needs.
We ensure that all children are provided with rich learning experiences that aim to:

- Prepare our children for life in an increasingly scientific and technological world today and in the future.
- Help our children acquire a growing understanding of the nature, processes and methods of scientific ideas.
- Help develop and extend our children's scientific concept of their world.
- Build on our children's natural curiosity and help them to develop a scientific approach to problems.
- Encourage open-mindedness, self-assessment, perseverance and help develop the skills of investigation – including: observing, measuring, predicting, hypothesising, experimenting, communicating, interpreting, explaining and evaluating.
- Develop the use of scientific language, recording and techniques.
- Make links between science and other subjects.

Development of Skills

Working Scientifically is always taught through the programmes of study. Pupils at Parklands learn to use a variety of approaches to answer relevant scientific questions by collecting, analysing and presenting their findings. Children will use different types of enquiry throughout each year:

- Observe over time
- Classifying and grouping
- Pattern seeking
- Comparative and fair test
- Research and secondary sources.

Through this approach we aim to develop the following skills: observing, raising questions, predicting, hypothesising, planning, controlling factors (fair testing), measuring, collecting and interpreting data, constructing tables and graphs, explaining, communicating and evaluating findings, researching information.

EYFS

In EYFS, science is included within the 'Understanding the World' area of learning. As with other learning in Reception, children will mainly learn about science through games and play – which objects float and sink during water play, for example. Activities such as these will help children to develop important skills such as observation, prediction and critical thinking. In this phase, children are often introduced to individuals, concepts and ideas, building firm foundations for progressive learning in Key Stage 1.

Assessment

Teachers at Parklands use assessment effectively to plan lessons that builds on individual pupils' prior knowledge and provide feedback that genuinely helps pupils to improve their work in science. Teachers provide feedback to all pupils in order to address misconceptions, or challenge. Using the next steps symbol in line with marking and feedback policy.

Impact

The impact and measure of this can be seen in our children – they not only acquire the appropriate age-related knowledge linked to the science curriculum, but also skills which equip them to progress from their starting points, and within their everyday lives.

All children will have:

- A wider variety of skills linked to both scientific knowledge and understanding, and scientific enquiry/investigative skills.

- A richer vocabulary, which will enable them to articulate their understanding of taught concepts.
- High aspirations, which will see them through to further study, work and a successful adult life.

SEND and Equal Opportunities

Pupils with special needs and children who are working at greater depth will be given appropriately differentiated work. All pupils will have equal access to the Science curriculum regardless of race, gender, ability or SEND needs.

Equipment and Resources

There are sufficient teaching resources for most Science teaching units in school, which are replaced and renewed as needed. Resources are kept by the appropriate year groups, relating to their topics with some shared resources stored centrally. Links with outside agencies are promoted where possible for enrichment such as the hatching egg project. STEM events resources are readily available with links to Science Ambassadors, which are to used. National Science Events are encouraged at Parklands and we participate in these events to help engage and inspire children.

Reviewed date: September 2025

Reviewed by: Sophie Speed, Science Lead

Next Review date: September 2027