

Science Policy

Version 1.3

October 2026

Review date: March 2027

Version Control

Version	Date	Changes made	
V1	June 2016		
V1.1	June 2018	Amended to include Gardening as part of the Science curriculum	
V1.2	October 2020 November 2020	Equality statement added Policy reviewed and updated Approved at P&A Meeting on 16.11.2020	Rachel Enwonwu Joseph Aonso
V1.3	October 2023 November 2023 June 2025	Updated in light of new subject leadership and curriculum adaptations. Approved by Subject Leader. Noted as approved at Curriculum meeting 13.11.2023 and shared with all staff. Sustainability statement added.	Harini Sockalingam and Charlotte Clarkson
V1.3	October 2026	Reviewed, equality statement updated. No other changes. Due to be updated in Spring term 2027 in line with national curriculum changes.	Charlotte Clarkson and Felicity Taylor-Robinson

Equality Statement

At Park Hill Infant School, we continue to teach our children about what it means to be strong, positive and productive members of society. We have always taught our pupils about equality and this remains an important part of our curriculum. We ensure that we always celebrate diversity, promote equality, demonstrate respect and stand together to challenge all forms of discriminatory language and behaviour.

We recognise that education is a vital tool for powerful, permanent and informative change. Our continuously evolving curriculum demonstrates our determination to use education to tackle issues of racism, homophobia and inequality. We strive to ensure our curriculum and supporting resources reflect values of inclusivity, diversity, equality and belonging. We do this by planning to meet the needs of gender, managing the needs of children with special educational needs, of children who are more-able, gifted and talented, of children with disabilities, of children from all socio-economic backgrounds, children from different ethnic groups, religion and cultural backgrounds, and of those from diverse linguistic backgrounds.

Sustainability and the Curriculum

We aim for our pupils to become passionate about their role in protecting the natural world. Our curriculum provides opportunities to develop a broad knowledge and understanding of nature, sustainability and climate change. We support pupils to translate this knowledge across all curriculum areas into positive action.

Aims and objectives

Science teaches an understanding of natural phenomena. All children should be taught essential aspects of the knowledge, methods, processes and uses of science. The teaching of science aims to develop a sense of excitement and curiosity about natural phenomena.

Our objectives in the teaching of science are for all our children and follow the Science Programmes of study set out in the National Curriculum 2013:

- to ask and answer scientific questions;
- to work scientifically to plan and carry out scientific investigations;
- to know living things and their habitats;
- to know about plants and animals including humans;
- to know about everyday materials and their uses;
- to know about seasonal changes.

Teaching and learning style

We use a variety of teaching and learning styles in science lessons. Our principal aim is to develop children's knowledge, skills, and understanding. Sometimes, we do this through whole-class teaching, while at other times, we engage the children in an enquiry-based research activity. We encourage the children to ask, as well as answer, scientific questions. They have the opportunity to use a variety of data, such as statistics, graphs, pictures and photographs. They engage in a wide variety of problem-solving activities.

We recognise that in all classes, children have a wide range of scientific abilities, and we ensure that we provide suitable learning opportunities for all children by adapting challenges to the needs of the child. We achieve this in a variety of ways: e.g. by

- setting tasks which are open-ended, engaging and can have a variety of responses;
- setting tasks of increasing difficulty (we do not expect all children to complete all tasks in the same way);
- setting tasks that cater to all ability levels and sufficiently challenge students;
- providing resources of different complexity, matched to the ability of the child;
- using classroom assistants to support the work of individual children or groups of children.

Science curriculum planning

Science is a core subject in the National Curriculum. The school uses the National Curriculum as the basis of its curriculum planning.

We carry out our curriculum planning in science in three phases (long-term, medium-term and short-term). The long-term plan maps the scientific topics studied in each term during the Key Stage. The science subject leader and school Curriculum Leader develop this in conjunction with teaching colleagues in each year group. Science is taught weekly and is planned for each week using the school's weekly 'Foundation Planning' template.

Our medium-term plans, give details of each unit of work for each term with learning objectives, expected vocabulary to be taught, suggested learning challenges and experiments. The science subject leader keeps and reviews these plans and adapts as necessary each year.

The class teacher is responsible for writing plans for each lesson. These plans detail specific learning objectives, expected outcomes, resources and adaptations of each lesson.

We have planned the topics in science so that they build on prior learning and build upon content from the previous year. We ensure that there are opportunities for children of all abilities to develop their skills and knowledge in each unit, and we also build progression into science concepts, so that the children are increasingly challenged as they move up through the school. Progression in our Science curriculum is outlined in detail on our medium-term Science 'Learning Ladder'.

The Foundation Stage

We teach science in reception classes as an integral part of the topic work covered during the year. As the reception class is part of the Early Years Foundation Stage, we relate the scientific aspects of the children's work to the objectives set out in the Early Learning Goals (ELGs) which underpin the curriculum planning for children aged three to five.

The contribution of science to teaching in other curriculum areas

English

Science contributes significantly to the teaching of English in our school by actively promoting the skills of reading, writing, speaking and listening. Some of the core texts that the children study in English lessons are linked to scientific themes such as the Seasons and animal habitats. The children develop oral skills in science lessons through discussions (e.g. of the environment) and through recounting their observations of scientific experiments. They develop their writing skills through writing reports and projects and by recording information.

Mathematics

Science contributes to the teaching of mathematics in a number of ways. When the children use weights and measures, they are learning to use and apply number. Through working on investigations, they learn to estimate and predict. They develop accuracy in their observation and recording of events. Many of their answers and conclusions include numbers.

Computing

Computing is used to animate and model scientific concepts, and to allow children to investigate processes which would be impracticable to do directly in the classroom. Children use computers to record, present and interpret data, to review, modify and evaluate their work, and to improve its presentation. Children learn how to find, select, and analyse information on the Internet and on other media.

Humanities subjects

Science contributes significantly to the teaching of humanities. For example, there are many overlaps with geographical understanding as children learn about their environment and how it has changed over time. Some significant people important to the development of science are studied in history lessons. Teachers will take opportunities that arise in science lessons to explore issues of awe and wonder in the natural world.

Gardening

Science is used extensively to link within the growing program at the school. Children work scientifically, perform tests and observe numerous scientific concepts within gardening, which helps to deepen their knowledge and understanding of plants and the process of growing. From seed planting to the cooking of produce that is grown and harvested within the school, Science is continually integrated in a purposeful way to enhance childrens' learning and achievement.

Science and inclusion

At our school, we teach science to all children, whatever their ability and individual needs. Science forms part of the school curriculum to provide a broad and balanced education to all children. Through our science teaching and gardening program, we provide learning opportunities that enable all pupils to make good progress. We strive hard to meet the needs of those pupils with special educational needs, those with disabilities, those with special gifts and talents, and those learning English as an additional language, and we take all reasonable steps to achieve this. For further details, see individual whole-school policies: Special Educational Needs; Disability Discrimination; and English as an Additional Language (EAL).

When progress falls significantly outside the expected range, the child may require additional assessment by outside agencies. Our assessment process looks at a range of factors – classroom organisation, teaching materials, teaching style, and differentiation – so that we can take some additional or different action to enable the child to learn more effectively.

We enable all pupils to have access to the full range of activities involved in learning science. Where children are to participate in activities outside the classroom (a trip to a science museum, for example), we carry out a risk assessment prior to the activity, to ensure that the activity is safe and appropriate for all pupils.

Assessment for learning

Teachers will assess children's work in science by making informal judgements during lessons. On completion of a piece of work, the teacher assesses it, and uses this assessment to plan for future learning. Written and/or verbal feedback is given to the child to help guide his/her progress. Children are encouraged to make judgements about how they can improve their own work and that of their peers.

At the end of each term teachers complete an assessment grid for each child in relation to their progress within the particular area of science that was covered during the term. Their ability to work scientifically is also assessed within this as well. The results are analysed by the subject leader, along with the teacher assessments are made observing children's work throughout the year.

Resources

We have resources for all science teaching units in the school. We keep these in a central store, where there is a box of equipment for each unit of work. There is also a collection of science equipment which the children use to gather weather data. The library contains a good supply of science topic books and computer software to support children's individual research.

Monitoring and review

The coordination and planning of the science curriculum are the responsibility of the subject leader, who also:

- supports colleagues in their teaching, by keeping informed about current developments in science and providing a strategic lead and direction for this subject;
- gives the headteacher an annual summary report in which s/he evaluates the strengths and weaknesses in science and indicates areas for further improvement;
- uses specially allocated regular management time to review evidence of the children's work, and to observe science lessons across the school.

This policy will be reviewed at least every three years, or sooner if necessary.

Signed: _____

Print Name:_____

Date: _____