Science Policy

This policy was agreed in May 2026 and will be reviewed in May 2028

Chair of Governors  Date 19/5/26

Headteacher  Date 19/5/26

Science Policy for The Peak Federation (Grindleford and Bamford Primary Schools)

Introduction

This Science policy outlines the vision, aims, and practical implementation of the teaching and learning of Science at our Primary Schools. Our policy is guided by the principles of the 2014 National Curriculum in England and the expectations set forth by Ofsted. We aim to inspire a love of science through rich, engaging, and practical learning experiences that cultivate curiosity and critical thinking in all areas of science.

Vision Statement

At our school, we believe that high quality science education is essential for developing pupils' curiosity, confidence and understanding of the world around them. Science equips pupils with the knowledge, vocabulary and enquiry skills they need to ask questions, think critically and make sense of natural phenomena. Our science curriculum is deliberately designed to build secure substantive knowledge (the scientific facts, concepts and ideas) alongside strong disciplinary knowledge (the skills of working scientifically), to help our pupils know more and remember more over time.

Our vision is for science to be an inclusive, ambitious and engaging subject for all pupils, in which oracy plays a central role in learning. We recognise that pupils deepen understanding by talking about their ideas, explaining their reasoning and using scientific vocabulary accurately. Through structured talk, discussion and presentation, pupils are supported to clarify thinking, challenge misconceptions and secure learning. This policy sets out our shared approach to science through clearly defined Intent, Implementation and Impact, supporting high standards, inclusive practice and continuous improvement.

Aim and Intent

Our aim is to deliver a broad, balanced and ambitious science curriculum that enables all pupils to develop secure substantive knowledge and well developed disciplinary knowledge. The curriculum is designed so that knowledge builds cumulatively, enabling pupils to know more and remember more as they progress through the school.

We intend that pupils will:

- develop secure substantive knowledge and clear understanding of key scientific concepts;
- build disciplinary knowledge through planning, carrying out and evaluating scientific enquiries;
- learn and use accurate scientific vocabulary, both orally and in writing;
- use oracy to articulate scientific thinking, explain reasoning, justify conclusions and engage in respectful discussion;
- make meaningful links between new learning and prior knowledge to support retention;
- understand the relevance of science to everyday life, the local environment and future careers;

- experience achievement and enjoyment in science through inclusive and adaptive teaching;
- make strong progress from their individual starting points, including disadvantaged pupils and those with SEND.

Oracy is a deliberate curriculum driver, enabling all pupils—particularly those who may struggle with literacy or confidence—to access, rehearse and demonstrate scientific understanding.

Implementation

Science is taught regularly and systematically through a carefully sequenced 2 year rolling curriculum mapped directly from the National Curriculum for Science (England). Planning prioritises the deliberate sequencing of substantive knowledge, with key concepts revisited and built upon so pupils are supported to know more and remember more. Retrieval practice, revisiting prior learning and explicit links between units strengthen long term retention. Disciplinary knowledge and Working Scientifically skills are taught and embedded following the PLAN progression maps to inform and guide teaching and learning.

Teaching is practical, enquiry led and evidence informed. Lessons explicitly incorporate oracy strategies, such as:

- structured partner and group talk;
- Teacher modelled scientific explanations;
- use of sentence stems and talk frames;
- opportunities to present findings in a range of ways eg. Written, verbally, drawing, images/video

Explicit vocabulary instruction supports pupils to use scientific language accurately, supporting both spoken and written expression. Adaptive teaching strategies—including scaffolding, pre-teaching of vocabulary, flexible recording methods and targeted support—ensure all pupils can access learning and engage confidently in scientific discussion.

Assessment supports learning rather than creating unnecessary workload. Ongoing formative assessment, questioning and talk based assessment reveal pupils' understanding and inform next steps in the moment. TAPS **(Teacher Assessment in Primary Science)** are used across both key stages and support focused assessment of disciplinary knowledge, including pupils' ability to explain and present scientific thinking. Subject leaders monitor provision through learning walks, work scrutiny, pupil voice and data analysis.

Professional development, specialist advisory input and collaborative partnerships strengthen teaching, leadership and curriculum quality. These include the ongoing participation with the Ogden Trust Partnership and completion of a Primary Science Quality Mark (PSQM)

Impact

The impact of our science curriculum is seen in pupils who know more and remember more, and who can talk confidently and accurately about their scientific understanding. Pupils use

scientific vocabulary appropriately, explain concepts clearly and apply disciplinary skills when working scientifically.

Pupil voice demonstrates some confidence in discussing learning, explaining enquiries and reflecting on outcomes. Work in books shows clear progression in substantive knowledge, disciplinary knowledge and the ability to articulate scientific thinking in a range of adapted ways to support all learners. Oracy supports inclusion, enabling all pupils to demonstrate understanding regardless of their written ability.

Assessment information shows that pupils make good progress from their starting points, with outcomes broadly in line with national expectations. Monitoring by subject leaders ensures teaching remains inclusive, ambitious and effective, supporting continuous improvement and ensuring that all pupils are supported to succeed as confident, articulate young scientists.