



SCIENCE SUBJECT OVERVIEW

We love science at NCJPS. Teachers enjoy teaching it, and children are keen to undertake investigations and make postulations about the world they live in. We want children to ask pertinent questions, explore any misconceptions that might arise and seek to provide answers through discussion and collaborative investigation. Our curriculum helps children develop scientific knowledge and conceptual understanding, develop understanding of the nature, processes and methods of science, and equips them to understand the uses and implications of science, today and for the future.

'The science of today is the technology of tomorrow' - Edward Teller

Core Threads

- Working scientifically (processes, methods, prediction, enquiry)
- Thinking and talking scientifically (collaborating and reasoning – using scientific vocabulary confidently)
- How science impacts on our lives, now and for the future

Links to Reading

- Scientific vocabulary
- Books for hooks
- Explanation & instructional texts
- Scientific biographies

Inclusive Practice

Collaborative investigations give children a purposeful role in carrying out scientific enquiry. Children are given the freedom to model, draw and talk about their learning in a variety of ways. DEAL strategies also provide an inclusive forum for learning.

Knowing more, remembering more

Quizzes, co-operative learning strategies such as True/False/It Depends, vocabulary investigations, learning wall displays, DEAL strategies, feed-forward marking, concept reviews at the start of lessons, models and games.



Our curriculum is underpinned by our RESPECT VALUES, which are covered across all subjects. The following values are exemplified in this subject:

Resilience: Working in a team to plan, carry out, review and evaluate scientific experiments

Empathy: Listening to the opinions of others and suggesting refinements to their scientific methods

Self-awareness: Developing the confidence to predict and articulate scientific concepts clearly

Positivity: Using growth mindset and not giving up when concepts are difficult and enquiry does not immediately provide answers to their original questions

Excellence: Recording and explaining their learning in a clear and ordered manner

Communication: Using precise scientific vocabulary to voice their own ideas and the hypotheses of others

Teamwork: Opportunities to work collaboratively with peers on investigations and enquiries

Sequence of Learning

Early years: Children are encouraged to observe the world around them, ask questions and talk about what is similar and what is different.

KS1: These skills are built upon using planned units of work that develop children's understanding of the natural world and encourage independent investigation into natural phenomena, and appreciation of human's impact on the world.

KS2: Further development of children's understanding expands their knowledge of the world around them, the universe beyond and how scientific enquiry can help explain these concepts.