Joseph Turner Primary School

Science

Policy and Guidance

Approved by Governors September 2023
Curriculum and Standards Committee

To be reviewed September 2025

Governors print M. Wagstaff

Governors signed M. Wagstaff Date 13.12.23.

Science Curriculum Intent

It is our intent at Joseph Turner Primary School for pupils to be fully immersed in every aspect of Science and for them to recognise the importance of Science in daily life. We ensure the teaching and learning of Science has the importance and prominence it deserves by delivering a well-rounded, engaging curriculum. We use Snap Science as our programme of study which enhances our quality first teaching. The Scientific area of learning is concerned with increasing pupils' knowledge, understanding of our world, and with developing skills associated with Science as a process of enquiry. It will develop the natural curiosity of the child, encourage respect for living organisms and the physical environment and provide opportunities for critical evaluation of evidence. We ensure that the Working Scientifically skills are developed and extended so that they can be applied when using equipment, conducting experiments, building arguments and confidently explaining scientific concepts. Science is encouraged to be hands on, investigative and fun.

Our pupils develop cultural capital by engaging in a wide range of real-life experiences and opportunities. Our lessons require children to engage indoors and outdoors with the features of the real world: real animals, real plants, real food, real tools, real materials and objects. Children are given regular opportunities to visit areas in our outdoor environment and build up a rich understanding of how it changes throughout the year. Cultural capital is developed by making meaningful links to relevant jobs and role models are highlighted during lessons to improve children's understanding about people in society and their local community. Books and stories are utilised to promote curiosity, as well as enrich and embed key vocabulary. Children also have the opportunity to take part in 'British Science Week' each year, engaging in themed activities, visitors or workshops. Further opportunities to develop cultural capital include school trips such as a visit to a local zoo or farm.

Science Curriculum Implementation

Joseph Turner Primary uses the Collins Snap Science scheme to provide a structured and coherent programme of learning that builds progressively through each year and across the school. Snap Science is a clear and comprehensive toolkit for quality first teaching of Science, ensuring coverage of the National Curriculum objectives. It provides planning alongside videos, animations and slideshows, helping to ensure that the lessons are engaging. Science is taught weekly to ensure that children receive a clear learning journey and develop their skills in an understandable sequence. It also promotes consolidation and recall. Teachers supplement this with other practical experiences of working scientifically. We aim to inspire and excite children with such activities so that they view

scientific learning positively. Scientific skills and understanding at Joseph Turner will be reinforced by Science focus days and visitors to the school.

Science Curriculum Impact

At Joseph Turner, our pupils will make good progress in their science knowledge, recall and skills, providing them with the foundations for understanding the wider world. Children will recognise and apply key scientific vocabulary both verbally and written, working collaboratively and practically to investigate and experiment. They will be empowered and inspired for a future interest and possible career in science. The large majority of children will achieve age related expectations by the end of the year.

Inclusion and Equal Opportunities

Teachers plan using Snap Science plans for support to provide challenge for all learners through a variety of approaches and tasks appropriate to ability levels.

- Children may be grouped by ability to promote peer teaching or mixed ability to support less able.
- Learning experiences are adapted where necessary to enable all learners to access the curriculum.
- Support for children with learning barriers or who are having difficulty in understanding particular concepts or vocabulary.
- Teachers and support staff who work with specific children to promote understanding.
- The more able pupils given suitably challenging tasks.
- The use of good quality resources are centrally stored, and ensure that children have increasing access to hands on experiences.

Assessment

- Science objectives in line with the National Curriculum and SNAP Science are on DCPro for each year group.
- Staff are to assess as with other core subjects and update DCPro on a regular basis.

Monitoring

Regular monitoring will take place to ensure quality first teaching. This will include;

- A KWL grid or alternative method to identify and assess prior learning and identify next steps and gaps in learning. This will then inform planning and programme of study.
- Lessons are planned using SNAP Science to ensure key knowledge and skills are developed over time following a learning journey.

- By the end of each key stage, children are expected to know, apply and understand skills that are set out in the National Curriculum.
- Children receive feedback through feedback and assessment, both written and verbally.
- In EYFS, we use the Development Matters statements to assess the children's Understanding of the World.
- A range of written and verbal questioning will allow pupils to explain and deepen their understanding and promote thinking of Science as part of the wider world.
- Book scrutinies monitor coverage of knowledge and skills, differentiation and progression of skills. Also to monitor marking and challenges follow school policy.
- Planning scrutinies will ensure Snap Science is being used and teachers are modifying and improving where necessary for their classes. It will allow coverage, progression, questioning skills and health and safety is being planned into lessons.
- Lesson observations will allow Science Lead to monitor quality first teaching, give support and gain ideas to share with other staff.
- Learning walks can provide opportunity to focus on the children's interest and engagement in Science lessons and to ensure Science working walls with appropriate vocabulary are up to date.
- Pupil voice gives children the chance to share their opinions, likes, dislikes and ideas for improvements in the Science curriculum. It will also show levels of engagement and questioning will provide an insight into pupil's understanding and progression.

Health and Safety

- All teaching and support staff must read this policy to ensure high expectations are met.
- Teachers must assess potential risks and seek advice from middle or senior leaders if unsure.
- Risks will be incorporated into teaching slides and shared with support staff before the lessons and children during lessons.
- Pupils must be made aware of safety issues and, where appropriate, the reasons behind them.
- Age-appropriate equipment shall be used to investigate and experiment with teacher or support staff guidance or monitoring.
- Safety equipment, such as safety goggles, gloves etc, will be used as required.
- All staff are expected to use equipment with care and return in good condition to the store room (Rainbow room).
- Any breakages or losses must be reported as soon as possible to Science Lead verbally or by email.