

Our Vision for Science at St. Matthew's Primary School

Intent

At St Matthew's it is our intention for our children to leave us as confident scientists both in their subject knowledge and working scientifically.

Our main aims are:

- To encourage curiosity and exploration
- To have children who are passionate and excited about learning science
- To have pupils who are confident to work independently and collaboratively in groups
- To have pupils who can talk about key scientists and how they have impacted our lives
- To have learning that encourages oracy skills to be developed
- To have pupils who are able to problem-solve, think critically and learn through making mistakes, self-correction and discovery
- To have pupils who are confident to explain their findings to their peers and adults.
- To have pupils who understand the importance of science in everyday life and how it has shaped our past and future.
- To have opportunities for outdoor learning that enriches the science curriculum
- To have high standards for outcomes within our science curriculum
- To have pupils who have a range of science capital opportunities available to them
- To have opportunities to celebrate good science work across St Matthew's

Implementation

In order to implement our vision at St Matthew's, we have the following:

- Weekly science lessons are taught as part of the core curriculum
- Opportunities for hands-on learning working scientifically
- The teachers will deliver lessons that will develop the children's scientific skills and knowledge.
- Children's independence is developed through clearly-defined science group roles: Experimentor, Co-experimentors, Lab Technicians and Lead scientists
- Working scientifically lessons are based around 'real-life' problems
- Staff promote problem solving and independence by giving simple instructions at the start of practical lessons to allow pupils to find the problem themselves.
- Seesaw is used to
- A3 laminated stick it Planning Like a Scientists are used to support and make planning of experiments more engaging and inclusive by doing so in mixed-ability groups
- Medium-term planning and displays will show exemplar scientists and how they have influenced our lives
- Science knowledge and skills are taught and practised during weekly trips to Windsor Gardens
- Termly monitoring and feedback to staff by science lead and SLT to ensure high expectations are being established across the school.

- Science planning is reviewed regularly by the science coordinator in-line with feedback from staff.
- Provide a range of opportunities to develop science capital through: trips, visits, after school clubs, booster and transition opportunities at locl secondary schools etc.
- Resources are well-organised and readily accessible to staff and children.. The
 equipment is boxed and labelled either as part of a topic (6 per year group). An
 additional fun science cupboard is available to support after-school science clubs and
 enrichment activities.
- Great science work is celebrated through termly Nobel-Prize winners in assembly, stars and stickers for excellent work, students example work on classroom and communal displays and through Science Ambassadors.
- P4C, Explorify and concept cartoons are used to assess prior knowledge and possible misconceptions

Impact

- Children will leave St Matthew's meeting age-related expectations within science.
- Children will have enthusiasm and enjoy their science learning.
- Teachers will have secure subject knowledge and feel confident to challenge misconceptions within lessons
- Children will have a good understanding of what makes a good scientist and are able to demonstrate this through practical and oral explanations
- Children will have opportunities to access extra-curricular science opportunities
- The science Coordinator will have a clear understanding of the areas of strength and development. These will be used to drive improvement across the school.
- Staff will feel supported by the subject lead regarding planning, CPD and resource