

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

<u>Intent</u>

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: Experimenter, Co-experimenters, 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 local 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, examples of students' 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