



## Science at Meadowbank Primary School

### Introduction

At Meadowbank Primary School we are committed to achieving the best for all of our Meadowbank Family. Our success is evidenced in the fulfilment of our Mission **'Life Long Learners, Leaders of Change, Lasting Legacy'** and our vision that all will **'Flourish and Inspire.'**

The Teaching and Learning approach is at the core of our school and explains how learning is at the centre of all that we do. Each one of us are aspirational for our children and for each other with our vision being that all will **'Flourish and Inspire.'** The approach that we take ensures that everyone is committed to achieving a high quality consistent approach to learning where we are dedicated to providing a unique curriculum which begins with the needs of the learner. Our inclusive approach ensures that all children grow as independent and confident individuals who will be successful lifelong learners and have a voice in their learning and development.

### Our School Values are: -

Community  
Respect  
Aspiration  
Achievement  
Collaboration

### Our Indicators of Success are for everyone to be: -

Safe and happy  
Curious and Confident  
Supported and Challenged  
Included and Valued  
Active and Healthy



### OUR MISSION

AS LIFE LONG LEARNERS	AS LEADERS OF CHANGE	OUR LASTING LEGACY
 <p><b>Limitless Learning:</b> You never stop learning. New knowledge and skills excites us and makes us want to find out about all the things we don't even know.</p>	 <p><b>Change Makers:</b> We change things for the future so the world is a better place for everyone. We make a difference to improve lives for all.</p>	 <p><b>Excellence For All:</b> A curriculum that helps to prepare you for your life. Learning that makes you buzz with excitement.</p>
 <p><b>Belonging Together:</b> Working as a team together and across our schools with a shared mission and vision so that we are all on a learning journey together. When we learn as one family we are more powerful.</p>	 <p><b>Developing the minds of tomorrow:</b> Influencing the lives of others to achieve goals.</p>	 <p><b>Making it Matter:</b> Being the best that we can be so that we are ready for our future. Making every moment special and trying our best. We are proud of our achievements and of each other's.</p>
 <p><b>Nurturing Ambition:</b> Following your dreams and goals because they make life exciting. Having goals makes you challenge yourself. Having ambition helps you find your way so you can aim for whatever you want to achieve.</p>	 <p><b>Empowering Everyone:</b> Building trust and valuing each other in school and across our schools so that we can make positive contributions. We act as one team, one family who learns.</p>	 <p><b>Ready For the Future:</b> We stretch ourselves preparing for the future so we are ready for new adventures.</p>

***'Our education system has to prepare children for a world we cannot imagine'***  
**Dylan Wiliam 2013**

### **As Lifelong Learners...**

**"You never stop learning. New knowledge and skills excite us and makes us want to find out more about all the things we don't even know." Children's Leadership Team 2019**

### **Science Learning Intention**

Meadowbank Primary School's Science curriculum endeavours to prepare our children for a rapidly changing world. A rich understanding of the world around us is key to creating effective citizens who can contribute to school, the local community and beyond. Our approach to Science Capital ensures that learning experiences are in line with and value our children's scientific experience as well as personalising and localising science for those needing to build new capital. Through explorative and investigative learning opportunities; children at Meadowbank are enabled to be curious, discover and question the world around them. By working scientifically to enquire, observe, conduct and respond we make links between the skills and powerful knowledge required to ensure all children understand the reason behind their learning and make crucial connections with other areas of the curriculum.

### **Aims**

- To help shape future citizens into globally aware young people.
- To enable children to build on their own individual Science Capital.
- To support learners in answering their own curiosities about the world.
- To facilitate learners in making their own decisions about their learning.
- To encourage questioning, research and discovery.
- To develop scientific oracy through discussion, debate and exploration.



### **As Leaders of Change...**

**“We change things for the future so the world is a better place for everyone. We make a difference to improve lives for all”. Vision and Mission Team 2019**

#### **Learning Journey (Implementation)**

Science at Meadowbank follows a cross curricular and thematic approach. We make links between science and the wider curriculum by linking powerful knowledge and skills in order to create a deep understanding of the reason behind scientific learning and its purpose in our local community and beyond. Science is planned, for each year group, using the Science progressive skills, knowledge and vocabulary maps which enable teachers to ensure they are always planning for the next steps in learning around any scientific concept. Long term planning identifies scientists and significant figures which give further context to thematic based learning and ensures a link to those leaving a Lasting Legacy. Knowledge and skills are then further enhanced by the use of scientific vocabulary and experiences rich in practical and real life opportunities. It is the role of the adults to facilitate scientific learning. Children across school have the opportunity to become Leaders of Change by asking their own questions, sharing their own science capital and developing their own understanding through their own investigations.



#### **Learning Environment and Immersion**

To ensure our young scientists become Life Long Learners we plan for a rich and innovative scientific environment that every child has access to. This includes key vocabulary, question stems, scientific equipment and high quality texts for children to access independently. In order to engage children's curiosity; a range of stimulus linked to the current theme, enriches the classroom environment and encourages oracy through discussion, debate and discovery. Science Capital is built through the use of real life objects and meaningful experiences which ensure they can see the purpose and reason for science beyond the classroom.

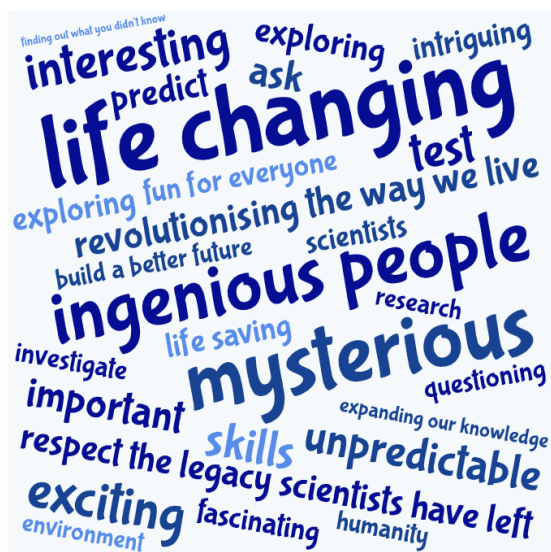
#### **Assessment for Learning**

Science assessment is captured through the use of the Science skill, knowledge and vocabulary progression maps and each year group's curriculum journals; which clearly outline the medium term planning and learning journey across a half term. This is used to inform planning and map coverage across the year as well as include the children's voice and their questions, interests and experiences. This sequence of learning is evident in each child's Science book and highlights of this are captured and evidenced through the curriculum journal as the theme progresses. Personalised short term planning ensures that teachers plan for children to demonstrate their understanding in a range of ways and ensures that this enables them to show their scientific knowledge and skills to the best of their ability; this may include videos, voice recordings, cross-curricular writing, diagrams and data collection. Feedback is given verbally during a science lesson so that each child can address misconceptions and make accelerated progress towards meeting and exceeding the age related expectations for that scientific concept.

### A Lasting Legacy...

“Being the best that we can be so that we are ready for our future. Making every moment special and trying our best. We are proud of our achievements and of each other.” Children’s Leadership Team 2019

### What our children think and say about Science



“It is important to understand how science has revolutionised the way we live. It will help us build a better future, not only for humanity, but the environment too.”

Science Ambassador Team Years 4-6,  
January 2020

### Monitoring and review

The Science leader is responsible for the rigorous monitoring of science through book and planning looks, pupil voice, lesson pop ins and whole school CPD. Ongoing analysis of outcomes enables the Science leader to identify vulnerable groups of children across school and support staff in enabling children within these groups to accelerate progress. Feedback to the teaching team then informs next steps in monitoring and support so that there can be personalised and effective JPD planned to address areas for development. Our children are involved in this monitoring process in a number of ways across the academic year. Children are empowered to talk about their learning through the curriculum journals and their own books during pupil voice opportunities. Our children can talk about their prior scientific learning and how it links to other areas of the curriculum and wider world. Our Science Ambassador Team are involved in science pop ins, environment check ins and regularly share their ideas for making Science the best that it can be at Meadowbank.

### Joint Practice Development

At Meadowbank teachers are role models of lifelong learning through collaboration and pedagogical research, with our partners across the Education Learning Trust and other local schools. We support the growth of all adults at every level which accelerates the progress and outcomes for children and creates a successful teaching and learning culture that leaves a lasting legacy. Therefore, at Meadowbank Primary School professional development is an investment in our valued staff as leaders of learning, in the enrichment of our children and in the very fabric of our school. This investment will no doubt reap rewards and bring about raised standards in all that we do.

The governing board reviews this document annually. The governors may, however, review the contents of the document earlier than this if the government introduces new regulations, or if the governing board receives recommendations on how this approach might be improved.

Date	Document version	Document Revision History	Document Author / Reviewer
20.11.2019	1.5	Policy reviewed	C Ball
28.02.2020	2.0	Reviewed – Significant changes	C Ball