Moorside Primary School



Science policy



MOORSIDE PRIMARY SCHOOL PURPOSE, VISION & VALUES

Our Purpose

Moorside Primary is a school at the heart of our diverse community in the West End of Newcastle. We pride ourselves in being a caring school community where everyone is welcome.

We strive to deliver an outstanding education for all our children.

We help everyone to become caring and active citizens

We encourage everyone to thrive and achieve their full potential.

Our Vision

We want everyone in our school to work together to make us as good as any school can be.

We want to create new opportunities for everyone to succeed.

We want to create a culture which broadens all of our horizons.

We want everyone to be able to tackle the challenges we will face in an ever changing world.

We want all of our children to effectively engage with each other and with our community.

Our values

We all believe that

Our local community deserves a school they can be proud of We are a caring community where everyone is welcome We all value, respect and support each other Our community has the right to be safe and healthy.

Our children should have the chance to enjoy and be enthused by their time in our school

We all work together to make sure that

Everyone always tries their best and take pride in all that they do Everyone demonstrates good manners at all times Everyone respects each other and show consideration Everyone respects and cares for our environment and resources Everyone celebrates each other's successes and achievements

Aims

Our aims in teaching science are that all pupils will:

- Develop a curiosity about the world in which they live through asking and answering scientific questions
- > Be equipped with scientific knowledge required to understand the uses and implications of science today and for the future
- Develop broad and balanced scientific knowledge and conceptual understanding
- > Acquire skills to enable planning and carrying out fair scientific investigations, using a wide range of equipment including ICT
- Analyse and evaluate evidence and present their conclusions clearly and accurately
- Develop a positive and enquiring attitude towards learning in science

Approaches to Teaching and Learning in Science

Planning for science is a process in which all teachers are involved based upon the National Curriculum and the Foundation Stage Profile. The basis of the teaching is to ensure pupils have first-hand experience to explore for themselves thus stimulating their curiosity. Science teaching in our school is about pupils developing skills, knowledge and understanding alongside independence through practical enquiry. We adapt and extend the curriculum to meet the needs of all pupils.

Curriculum planning

The science curriculum is progressive throughout all stages in school. Assessment for learning is paramount in the identification of smaller steps. This is in order to make objectives accessible for all and tailored to the pupils needs. The content of the National Curriculum is delivered with appropriate differentiation, ensuring all pupils have access to their learning using effective resources and having a wide range of experiences. Pupils have the opportunity to apply their knowledge and understanding in a range of contexts with a view to embedding the learning, from short term to long term memory.

Long term planning:

- Details the content and coverage of science for the academic year across all stages on a termly basis
- This is progressive across school to avoid unnecessary repetition
- > Special events, visits, visitors, cross-curricular opportunities are identified

Medium term planning:

➤ Each year group identifies specific skills to be taught alongside content, ensuring breadth and depth

Short term planning:

- Lessons are planned for and taught on a weekly basis
- > Details learning objectives, delivery, resources, use of adult support, key vocabulary
- Based on assessment for learning, the sequence of lessons will be adapted accordingly based on ongoing individual needs

Provision in Foundation Stage

During the Early Years Foundation Stage science is included in one of the seven areas of learning, Understanding of the World. It is delivered through a hands on and practical approach, which makes links with topics and the Characteristics of Effective Learning. Development matters is used to plan and assess the learning of pupils. By the end of the Foundation Stage pupils are expected to know about the similarities and differences in relation to objects, materials and living things. They make observations of animals and plants, explain why some things occur and talk about changes.

<u>Assessments</u>

Science assessments are purposeful and designed to inform and shape the future learning, allowing progression for all pupils. Assessment for learning is continuous throughout the planning, teaching and learning cycle. It is carried out in a variety of ways including observing pupils in their learning and questioning, discussing and listening to pupils.

Equality and Inclusion

We ensure that all pupils have the opportunity to gain and develop their science knowledge and understanding. Our expectations do not limit pupil achievement. Science is taught in a broad global and historical context. It is valued as a vehicle for the development of language skills by encouraging pupils to talk constructively about their experiences and observations. Where appropriate, science is closely linked to English and mathematics. We develop all pupils' enquiry by encouraging the ability to ask questions and critical thinking.

Extra Curriculum Opportunities

Through Inspire sessions and Family Learning, parental engagement has played a significant role in motivating pupils to engage in science outside of the classroom and with their families/carers. These experiences provide opportunities for pupils to learn collaboratively whilst also equipping pupils with a wider range of skills. After school clubs also provide an opportunity to investigate outside of the classroom content to develop the enquiring mind.

Health and safety

Any risks associated with a scientific activity should be identified and minimised through careful, thorough planning and by completing a risk assessment in line with school policy.

Roles and responsibilities

The science team and middle leaders will:

- Lead the development and review of the science policy in relation to statutory requirements and school priorities
- > Ensure there is continuity, consistency, balance and progression within science across school
- Support staff regarding subject knowledge, scientific skills and progression
- Monitor attainment and progression within the subject through the scrutiny of planning, pupils' work, pupil voice, displays, tracking data and assessments
- Develop a continuing portfolio of evidence reflecting learning taking place
- > Evaluate the effectiveness of resources and ensure appropriate resources are accessible and safe to use
- Attend relevant training and liaise with other professionals within the West Trust
- Disseminate CPD within staff meetings and provide bespoke support where required, directed by SLT
- Ensure all staff are aware of recent developments regarding science and be proactive in researching these

Other Policies linked to Marking and Feedback

- Teaching and Learning Policy
- Marking and Feedback Policy
- Homework Policy

Date to be implemented	May 2019
Date to be reviewed	April 2020