



MARSH GREEN PRIMARY SCHOOL
SCIENCE POLICY



MISSION STATEMENT

We at Marsh Green Primary School, firmly believe that each and every child deserves the very best opportunities and experiences to enable them to live fulfilling and successful lives and aspire to reach their full potential as a valued and respected member of the community.

“I will be the best I can be”

AIMS OF SCIENCE POLICY

Our Science Policy follows The National Curriculum 2014 for Science Guidelines and aims to ensure that all pupils:

- develop **scientific knowledge and conceptual understanding** through the specific disciplines of biology, chemistry and physics
- develop understanding of the **nature, processes and methods of science** through different types of science enquiries that help them to answer scientific questions about the world around them
- are equipped with the scientific knowledge required to understand the **uses and implications** of science, today and for the future

PURPOSE OF STUDY-WHY TEACH SCIENCE?

A high-quality science education provides foundations for understanding the world. Science has changed our lives and is vital to the world’s future prosperity. Through building key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how key knowledge and concepts can be used to explain what is occurring, predict how things will behave, and analyse causes. This understanding should be consolidated through their appreciation of applications of science in society and the economy.

In teaching science we are developing in our children:

- a positive attitude towards science and an awareness of its fascination;
- an understanding of science through a process of enquiry and investigation;
- confidence and competence in scientific knowledge, concepts and skills;
- an ability to reason, predict, think logically and to work systematically and accurately;

- an ability to communicate scientifically;
- the initiative to work both independently and in co-operation with others;
- the ability and meaning to use and apply science across the curriculum and real life.

PLANNING

School curriculum

The programmes of study for science are set out year-by-year for Key Stages 1 and 2. We are however, only required to teach the relevant programme of study by the end of the key stage. Science will be taught as a discrete subject in each year group. Opportunities for cross curricular learning, particularly maths, English and ICT, will be given in Science lessons. Within each key stage, school has the flexibility to introduce content earlier or later than set out in the programme of study.

Teachers will base their short term planning on the programmes of study (Medium Term Planning Provided) for their relevant year groups. The school follows the agreed planning map (attached)

Long Term planning: The curriculum map outlines the programmes of study that will be undertaken through the year by each year group.

Medium Term Planning: Teachers will take the responsibility to plan each unit of work and show clear progression and assessment opportunities. We do not follow a particular scheme at Marsh Green Primary school for Science, but we will use a variety of planning resources that are available to us.

Scientific knowledge and conceptual understanding

The programmes of study describe a sequence of knowledge and concepts. While it is important that pupils make progress, it is also vitally important that they develop secure understanding of each key block of knowledge and concepts in order to progress to the next stage.

Pupils should be able to describe associated processes and key characteristics in common language, but they should also be familiar with, and use, technical terminology accurately and precisely. They should build up an extended specialist vocabulary. They should also apply their mathematical knowledge to their understanding of science, including collecting, presenting and analysing data.

Taking a practical approach to science.

At Marsh Green Primary school, we believe in taking a hands on approach to science through developing a practical curriculum. We work hard to develop a love of science throughout the whole school by delivering innovative and practical lessons. Lots of opportunities will be provided throughout the year for children to enhance their learning through trips, science week, visitors and talks from different scientist.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

ASSESSMENT

Key Stage One

Teachers will assess each pupil based on 'I can' statements at the end of each unit based on a 1,2,3 scoring system.

- 1- Working below age related expectations
- 2- Working at age related expectations
- 3- Working above age related expectations.

Judgements will be made on observations made by the teachers throughout the lesson and evidence in the children's books.

Key Stage Two

At the end of each unit, pupils will complete an end of unit test which will assess their learning throughout the topic based on the 1,2,3 scale. Teachers will also submit their own judgements based on their observations in lessons. These results will be recorded in a KPI grid and collected by the science leader throughout the year to be analysed. Teachers will also make observations and judgements based on the working scientifically statements for each pupil and record a judgement.

MONITORING AND EVALUATION

- The role of the Science Leader:
- To review changes in the national curriculum and inform staff.
- To attend relevant CPD courses Science.
- Carry out an annual order of the schools Science resources and operate an efficient storage system.
- Collate end of year assessment results from each year group and analyse data.
- Monitor the teaching and learning in science through termly book monitoring opportunities and learning walks.
- Organise science events throughout the school year to develop and enhance children's learning.
- To co-ordinate the Science WoWs cluster

SAFETY

Following COSHH guidance 'Be Safe'.

PARENTAL INVOLVEMENT

Where relevant parents are invited into to school to offer any skills and knowledge they may have in a particular area to enhance the teachers skills.

REPORTING TO PARENTS

Following whole school policy based on National requirements and Wigan County Council guidelines.

MARKING WORK

Refer to the whole school policy.

Science Policy

June 2017

