

Member of staff responsible: Miss Michelle Launder
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Science Policy 2023

*“The important thing is to never stop
questioning”
Albert Einstein*

MISSION STATEMENT

At Water School our aim is to teach to inspire, motivate and nurture the next generation of creative and critical thinkers. We work in partnership with parents and the community to achieve the highest standards. Our main goal is to encourage our children to be resilient, respectful and independent learners, who are equipped for lifelong learning. Through stimulating, safe learning environments and excellent opportunities to succeed in and out of the classroom, we encourage children’s progress and achievements.

AIMS

At Water Primary School, we believe that a high-quality science provides the basics for understanding the world through biology, chemistry and physics. Science is continually developing and is vital to the world’s future, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. We aim to inspire children through thought proving questions and experiments which develop excitement and curiosity about the world around us as well as helping our children acquire a growing understanding of the nature, processes and methods of scientific ideas.

The national curriculum for science 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.

CURRICULUM AND SCHOOL ORGANISATION

The programmes of study for science are set out year-by-year for key stages 1 and 2 in the national curriculum.

Class teachers are responsible for ensuring that all of the relevant statutory content is covered and science is taught throughout school, with all year groups being taught separately. Teachers are to use STEM planning which provide high quality resources and child-led, interactive activities. Each lesson starts with a 'Big Question' which allows children to use their scientific skills. The Planning Grid below sets out the 'Water Curriculum'.

SCIENCE PLANNING GRID PER YEAR GROUP

Biology Chemistry Physics	أول 1	أول 2	Spring 1	Spr 2	Sum 1	Sum 2
EYFS	<u>Working Scientifically</u> Investigating changes in material (focusing on making play dough – liquid, solid) <u>Wonder</u> – Sweet experiment The human body	<u>Working Scientifically</u> Investigating changes in material (focusing on ice forming and melting) <u>Wonder</u> – Lava Lamp <u>STEM</u> Challenges linked to Trad Tales	<u>Working Scientifically</u> Investigating magnetism Investigating light and shadows <u>Wonder</u> – Dancing Raisins	Use their sense whilst outside. Name, describe and draw plants. <u>Wonder</u> – Cornflour Slime	Everyday materials Name, describe and draw animals. <u>Wonder</u> – Magic Dancing Milk	<u>Working Scientifically</u> Investigating Floating and Sinking animals <u>Wonder</u> – A rainbow eruption Oceans and seas Underwater animals
To discuss David Attenborough throughout the year (our class Scientist) linked to caring for the world around them (plants and animals) Understand the effect of changing seasons on the natural world around them.						
Year 1	Scientist Focus: Mae C. Jemison	Animals including Humans	Animals including Humans	Plants	Everyday Materials	Everyday Materials
Year 1 - Seasonal Change – To be covered for the whole year – floor book to evidence – regular seasonal walks/forest school						
Year 2	Scientist Focus: Brian Cox	Animals including Humans	Living Things and their Habitats	Plants	Uses of Everyday Materials	Uses of Everyday Materials
Year 3	Scientist Focus: Marie Van Brittan Brown	Animals including humans	Rocks	Plants	Light	Forces and Magnets
Year 4	Scientist Focus: Steven Hawking	Animals including humans	Living Things and their Habitats	Electricity	States of Matter	Sound
Year 5	Scientist Focus: Marie Curie	Animals including humans	Living Things and their Habitats	Earth and Space	Properties and Changes in Materials	Forces
Year 6	Scientist Focus: George Washington Carver	Animals including humans	Living Things and their Habitats	Electricity	Light	Evolution and Inheritance

ASSESSMENT, RECORD KEEPING AND RECORDING

Assessment is generally the responsibility of the class teacher and is used to:

- Plan future teaching and learning.
- Provide summative information for parents and teachers.

A range of assessment techniques is used including:

- Teacher observation of children working.
- Discussion with and questioning of pupils.
- Marking and evaluation of any written work.
- Completion of Balance at the end of each unit.
- Evaluation of completed work (using learning journeys or Balance wheel) – by the children as well as the teacher.

DISPLAYS

It is the responsibility of all teachers to ensure that there is a display in each classroom linked explicitly to the current Science topic within class. These should be referred to during lessons and should be updated in a similar style to the working walls adopted in English and Maths. Key words relating to the topic should be displayed.

EQUAL OPPORTUNITIES

It is the responsibility of all teachers to ensure that all pupils, irrespective of gender, ability, race and social circumstance, have access to the Science curriculum and make the greatest progress possible.

SPECIAL EDUCATIONAL NEEDS / INCLUSION

The school will work to ensure that all pupils including those with special educational needs are provided with an appropriate Science curriculum. In order to achieve this, teachers will work to:

- Set suitable learning challenges and scaffold learning.
- Respond to pupils' diverse learning needs.
- Overcome potential barriers to learning and assessment for individuals and groups of pupils.

This policy is in line with other school policies and is a true reflection of the Science provision offered at Water Primary School.

Miss Michelle Launder
Science Lead
October 2023