Science Policy

WESTHOUSES PRIMARY SCHOOL

Record of Policy Amendment / History

Version/ Issue	Date	Author	Reason for Change

Introduction:

This policy outlines the key focus for teaching of Science at Westhouses Primary School and provides a framework to support teachers in the planning and delivery of the curriculum.

Intent

At Westhouses Primary, we encourage children to be inquisitive and curious throughout their time at school and beyond. Science provides children with the opportunity to understand the world around them. The science National Curriculum identifies three key areas in which the children should be taught: knowledge and understanding; working scientifically and the application of science. At Westhouses, we plan science to ensure that all children, from reception to year 6, cover these three aims in an engaging and accessible way. This is achieved through first-hand experiences and purposeful practical work that develop children's skills and knowledge.

Implementation

Teachers create a positive attitude to science learning within their classrooms and reinforce an expectation that all pupils are capable of achieving high standards in science. We follow the 'Developing Experts' scheme to provide a wide coverage of the science national curriculum, teachers supplement this scheme with resources from Explorify and PLAN.

- We provide problem solving opportunities that allow children to find out for themselves. Children are encouraged to ask their own questions and be given opportunities to use their scientific skills and research to discover the answers.
- Teachers use precise questioning in class to test conceptual knowledge and skills and assess children regularly to identify those with gaps in learning.
- We build upon learning and skill development from previous years.
- Working scientifically skills are embedded into lessons to ensure skill progression.
- New vocabulary is displayed on our vocabulary pyramids at the start of each unit and this is introduced through direct teaching.
- Teachers demonstrate how to use scientific equipment, and the various Working Scientifically skills in order to embed scientific understanding.
- Science will be taught in planned and arranged topic blocks to have a project based approached. This is a strategy to enable the achievement of a greater depth of knowledge.
- Children are offered a wide range of extra-curricular activities, visits, trips and visitors to broaden the curriculum further. These are purposeful and link with the knowledge being taught in class.
- Regular events, such as Science Week, allow pupils to come off timetable, to provide broader provision and the acquisition and application of knowledge and skills. These events often involve families and the wider community.

Impact

We want children to enjoy and value science and appreciate the range of skills it will provide them with. As mentioned previously, an essential part of the children becoming scientists is promoting curiosity and encouraging children to ask questions. By the end of KS2, our expectation is that:

- Children will be able to develop their own questions
- Children will be able to plan different types of enquiries to answer those questions
- Children will be able to communicate their findings in a variety of ways.
- children will understand that part of science is failing and problem solving helps to overcome these failures.
- Children will have a clear understanding of how scientists both past and present have contributed to society's understanding of the world around them.
- Children will understand the role that science and other STEM subjects play in solving some of the key problems facing the world, such as climate change.

Visions and Principles

Children at Westhouses Primary helped to create our Science School Vision. This showcases what children believe our science strengths are and what aspects of science children enjoy. We use these as a reflection point at the end of every science lesson to see which school principle we have been working on.

Assessment

Teachers use a variety of assessment tools, including: pre and post assessment reviews (key focus on the vocabulary learned throughout unit), pupil discussions about their learning and scrutiny of books (and digital platforms such as SeeSaw) to check for progress by the subject leader and SLT. We use a TAPS assessment at the end of every unit, to assess the a specific working scientifically skill.

At Westhouses, assessment and record keeping is an integral part of our teaching and learning policy. Books and written work provide records of pupil's achievements which help to inform planning for future learning, and reports of progress to parents.