## Curriculum Overview - Science



Intent	Implementation	Impact
<ul> <li>All children are encouraged to: <ul> <li>Understand that the knowledge, methods, processes and uses of science they are taught are useful in everyday life and how science can be used beyond primary school;</li> <li>Learn through practical and enquiry-based activities and science;</li> <li>Develop an appreciation of activities that are good for their own well-being and that of the world around them;</li> <li>Develop and use a range of scientific enquiry skills including observations, planning and investigations;</li> <li>Develop and use relevant specialist vocabulary for topics.</li> </ul> </li> <li>As part of our provision at Whatfield Primary Schools we aim to: <ul> <li>Provide teaching that has been structured to ensure that our children have first-hand science experiences from the beginning of their learning journey;</li> <li>Ensure that our pupils develop an understanding of their relationship with our physical world and the interdependent nature of this;</li> <li>For our children to become responsible stewards of our planet and its resources.</li> </ul> </li> </ul>	As part of this planning process, teachers need to plan the following:  • At the start of each new topic, provide activities that will encourage children to engage with, explore and extend their existing knowledge in order to ensure planning for the whole topic is accurately pitched;  • Carefully plan each learning sequence to ensure the relevant key features of scientific enquiry have been taught: observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing; and researching using secondary sources, and careful modelling of key scientific vocabulary has been used throughout;  • Working Scientifically – identify and embed the science skills that will be taught within each topic. Consider how they will deliver these, ensuring that the children are aware of the development of these skills;  • Use the PLAN Knowledge and Working Scientifically Matrices to support planning. Science is taught discretely, however, meaningful links across the curriculum are made to ensure creative cross-curricular learning, especially mathematics and technology.  • Identify areas of weakness and seek support from the science lead or organise CPD;	Impact is measured by ensuring that children not only acquire the age-related knowledge linked to the science curriculum, but also skills which equip them to progress from their starting points, and within their everyday lives.  All children will have:  • The skills to recall the rich learning experiences they have been provided with and know that each new taught concept provides a new, or builds on an existing, learning block;  • The ability to think critically, ask questions and use their metacognitive learning skills;  • High aspirations, which will see them through to further study, work and a successful adult life.  In addition, we measure the impact of our curriculum through the following methods:  • Pupil and staff perception questionnaires and discussion – to find out what our children enjoy and remember from their science learning;  • Bi-annual monitoring meetings, within and across the Federation and phases;  • Support staff in accurate assessment of both skills and knowledge

 Use of Knowledge Organisers that children can access and use for selfassessment purposed throughout the unit of work.

## As part of this assessment process, teachers will:

- Use TAPS focussed assessments every term to inform assessment and provide evidence of Working Scientifically through the TAPS Display Board;
- Summative end of unit assessments to identify gaps, report to parents and inform teaching.
- Make observations during lessons and give feedback to aid progress

## The subject lead will:

- Support staff as required in planning and assessment;
- Support staff with CPD and training.