

Harborne Primary School Curriculum Expectations

Science KS1/KS2



Who leads it?

Nicky Miller and
David Williams

Curriculum coverage

Every year group follows the PLAN scheme with additional quality teaching resources which cover the whole of the National Curriculum, making use of progression and sequencing. Our progression maps can be found on the Science area of the website.

All National Curriculum objectives for each year group are covered. Children are given the opportunity to consolidate previous learning and to progress into the next stages in line with our progression maps. The scheme is taught with a flexible approach to allow for adaptive teaching according to the needs of the children taught. Objectives may be adapted to suit the needs of learners and challenge objectives are used to stretch our children's scientific thinking and knowledge. SEND children are exposed to the whole class objectives, making use of a range of support strategies within the classroom. Our aim is to develop confident learners who use scientific questioning to look at the world around them and possess knowledge essential for the successful management of their future lives. We value the use of the development of curriculum content to apply to 'real life' learning.

How often?

Year groups 1-6 teaches science once a week. Reception weave scientific learning into daily missions, as set out in the EYFS curriculum.

Taught by whom?

Science is taught to children by class teachers. The delivery of teaching is discussed during weekly PPA sessions. TAs support and scaffold children in lessons where required and guided by the class teacher.

Raising the profile

Scientific success and enthusiasm for the subject is celebrated during achievement assemblies
Extra-curricular science clubs
Science Fair

What does a typical lesson look like?

*Some children have pre-tutoring (the coverage of content to expect in a lesson) just before their lesson.
*Children review previous learning with teachers during a lesson warm up, allowing children to intelligently explore previous curriculum content, embedding it in their long-term memory.
*Each lesson focusses specifically on a learning objective which support those from the National Curriculum. If the lesson is knowledge based, the concept is introduced and look at in different ways. If the lesson skills based, the skills are modelled by the teacher and then children have the opportunity to practise themselves. Meaningful links are made (and applied to everyday life where possible) between concepts in order to build a cohesive understanding of Science and the world around them over time. Teachers use questioning to develop understanding and encourage questions from children. *Teachers use adaptive teaching to deliver curriculum content whilst meeting the needs of the children in their class. *Key vocabulary is shared and embedded throughout the lesson, which is progressive throughout school. *The end of the lesson uses different review strategies for children to demonstrate their understanding of the taught concepts.

Parental engagement

Parent workshops
Summative assessment shared with parents

SEND adaptations

*pre-tutoring
*smaller, scaffolded steps for new learning
*retrieval practice for long-term memory
*varied adult and peer support
*additional practical resource

Which resources are used?

Our teachers use PLAN, Headstart Assessments and Insight Tracker, supplemented with other quality resources to plan, deliver and assess children's learning and progress.

Online learning and resources are available to all children through PurpleMash.

How are support staff used?

Support staff are used to further adapt to the needs of learners. They are used to support individual and small group access to Curriculum Content – through pre-tutoring, provision of resources and through intervention planning.

They are also used to challenge pupils further within lessons whilst class teachers support the specific needs of others.

Staff CPD

We have a science faculty who are responsible for the ownership of science teaching and learning within their year group – this includes training provided from the science leaders.

Science based Insets are delivered frequently at Harborne Primary School by the subject leaders for CPD for teaching staff focusing on adaptive teaching, sharing good practice and updates of resources.

Display expectations

All classrooms have a list of classroom display essentials. In science, these include: a vocabulary wall and marking codes for curriculum.

How is it assessed?

Teachers use Headstart and Insight Tracker to plan their lessons, which is signified on LOs in books and folders. Teachers use our marking policy to establish whether children have completely, partially or not met their LO. These tools are used to confirm teacher judgements based on what has been taught that term. Assessments are always used to inform future planning, adaptive teaching, interventions and concerns.

How is it monitored?

*learning walks (subject leads)
*book looks (faculty)
*pupil conversations (Subject leads)
*feedback to year group leads and SLT