

Science Intent

At Ashfield our **intent** is to give every child a broad and balanced Science curriculum which enables them to confidently explore and discover what is around them, so that they have a deeper understanding of the world we live in. We want our children to love science. We want them to have no limits to what their ambitions are and grow up wanting to be astronauts, forensic scientists, toxicologists or microbiologists. We want our children to remember their science lessons in our school, to cherish these memories and embrace the scientific opportunities they are presented with.

To achieve this, it involves exciting, practical hands-on experiences that encourage curiosity and questioning. Our aim is that these stimulating and challenging experiences help every child secure and extend their scientific knowledge and vocabulary, as well as promoting a love and thirst for learning. We want to equip our children with not only the minimum statutory requirements of the science National Curriculum but to prepare them for the opportunities, responsibilities and experiences of later life.

Science Implementation

At Ashfield, Science topics are taught within each year group, mainly in accordance with the National Curriculum. Cross-curricular links are also planned for, with other subjects such as History, Geography, English etc.

Topics are blocked to allow children to focus on developing their knowledge and skills, studying each topic in depth. Every year group will build upon the learning from prior year groups therefore developing depth of understanding and progression of skills.

Teachers promote enjoyment and foster interest of the scientific disciplines; Biology, Chemistry and Physics. Children explore, question, predict, plan, carry out investigations and observations as well as conclude their findings.

Children present their findings and learning using science specific language, observations and diagrams. In order to support children in their ability to 'know more and remember more' there are regular opportunities to review the learning taken place in previous lessons in our Feedback Friday sessions.

Termly CPD and online opportunities are available to staff to ensure high levels of confidence and knowledge are maintained. Teachers access a range of resources and planning from the Phil Watkins, PZAZ etc to support their teaching.

Effective modelling by teachers ensures that children are able to achieve their learning intention, with misconceptions addressed within it. Through using a range of assessment tools, differentiation is facilitated by teachers, to ensure that each pupil can access the Science curriculum.

Children are given clear success criteria in order to achieve the learning intention with differing elements of independence.

Pupils are regularly given the opportunity for self or peer assessment, which will then be used to inform planning, preparation, differentiation and address misconceptions within that lesson, or for the next lesson.

Science Impact

The impact of this curriculum design will lead to good progress over time, relative to a child's individual starting point and their progression of skills. Through various workshops, trips and interactions with experts our Science curriculum will lead pupils to be enthusiastic Science learners and understand that science has changed our lives and that it is vital to the world's future prosperity. We want to empower our children so they understand they have the capability to change the world. This is evidenced in a range of ways, including pupil voice, their work and their enjoyment for science.