

Abbey Academies Trust



Every Child Matters

Science Curriculum Statement

Amended

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| June 2019 | September 2022 | |
| December 2019 | | |
| May 2021 | | |

Every Child Matters within a loving and caring Christian environment

Striving for Excellence, Caring for All

As a RRS (Rights Respecting School – UNICEF) this upholds the following articles from the UNCRC (United Nations Convention on the Rights of the Child):
Article 29: Every child has the right to be the best they can.

Why we believe Science is important

We are surrounded by technology and the products of science every day. Public policy decisions that affect every aspect of our lives are based in scientific evidence. And, of course, the immensely complex natural world that surrounds us illustrates infinite scientific concepts. As children grow up in an increasingly technologically and scientifically advanced world, they need to be scientifically literate to succeed. We believe by providing an engaging, hands-on and inspiring Science Curriculum, we can commit to increasing our children's science capital, encouraging all children to see that science is relevant in their lives now and in the future. Teaching science to students is teaching them how to think, learn, solve problems and make informed decisions. These skills are integral to every aspect of a student's education and life, from school and beyond.

Remote Learning

During the enforced closure of schools as a result of the Covid-19 pandemic, Abbey Academies Trust remained committed to ensuring that the remote education offered followed our normal school curriculum as far as possible via recorded online learning, enabling pupils to obtain the building blocks they needed to move onto the next step in their learning. After our return to school in March 2021, the Science curriculum was refined to best support the development of our children's skills and knowledge, providing them with solid foundations and enabling them to 'fly high' as they continue their journey through school. A full Science curriculum has now resumed but staff remain mindful of gaps in knowledge that may exist because of school closures.

Intent: We aim for our pupils to be:

- Inquisitive thinkers who are keen to explore the world around them and to question the unknown.
- Equipped with accurate and appropriate scientific vocabulary so that they are able to communicate and contribute to scientific discussions, explaining their learning and different concepts.
- Able to draw upon and build on their prior scientific knowledge in order to make effective predictions, explaining their reasoning.
- Able to plan and carry out a scientific investigation, thinking carefully about what equipment they will require and what recordings they could make.
- Reflective learners who can consider the science behind different concepts, able to articulate what they have learnt, not just what they have done.
- Able to evaluate their practice, considering what has worked well and how they would improve in the future.
- Effective communicators who can communicate their ideas, opinions, questions and scientific findings to others through both the written and spoken word.
- Involved in whole-school science weeks, where they can share their learning with other learners and out wider school community.

Implementation: How do we do this?

- Undertaking and achieving the PSQM Gilt award (BAPA) and PSQM award (BEPPA) has helped to create a shared vision and standard for science across our schools, thus raising the profile of science amongst school stakeholders.
- Our academy professor– a female scientist who accompanies children through the different enquiry types and is a shared emblem for all ages – is championed across all year groups to promote the

importance of scientific enquiry. This ensures consistency and focus for science learning across the whole school.

- Knowledge organisers are used throughout each topic to anchor learning and support retrieval of key concepts.
- Science MTPs for each year group are monitored by the science team to ensure knowledge and skills coverage and progression.
- POP tasks (proof of progress tasks) and retrieval quizzes have been introduced to support the children in remembering more from the topics and previous topics, building long-term memory changes.
- Working Scientifically skills run throughout the whole school and progressively develop through three milestones. The children have reference sheets at the front of their science books. There is also mapping to show EYFS progression to KS1, KS1 to LKS2 and LKS2 to UKS2.
- Scientific vocabulary is specifically planned for and taught across topics.
- Pupils participate in SciFest, a bi-annual event that provides science visitors in school and evening shows, which the wider school community can access. Science related trips and visitors are seen throughout school, across the academic year to support classroom learning.
- Science based clubs are available such as Nature Club and Gardening Club.
- Teachers have been directed to free, online CPD which they can access to consistently build on their subject knowledge.
- Science leaders attend termly meetings with other subject leaders in the area to share good practice, keep up to date with publications, explore science learning opportunities and to continually reflect on science provision in our school.
- Termly topic titles can be science based, including 'Is It a Bug's Life?', 'Water, Water, Everywhere' and 'Let there be Light', thus putting science as a subject at the forefront of topic based learning.
- Science is included in termly homework tasks and parents are encouraged to take part in homework activities.

Impact

- Pupils show a positive attitude to science and their learning.
- Pupils are curious and want to question the world around them.
- Pupils see science as important for their future and understand the links to other subjects.
- Pupils talk scientifically using age appropriate vocabulary – they can articulate their learning confidently.

This is monitored through:

- Book/planning monitoring
- Drop –ins by the Science team
- Pupil interviews
- Summative and formative assessment
- Analysis of data
- Moderation

Other relevant documents:

- Academy Improvement Plan
- Science Action Plans
- Whole school long-term plan for science
- Year group curriculum maps
- Year group MTPs

- Year group Curriculum overviews