

Gayton and Middleton Primary Academies Computing Curriculum Statement

<u>Intent</u>	<u>Implementation</u>	<u>Impact</u>
At Gayton and Middleton Academies we deliver a high-quality computing curriculum that equips pupils to use digital thinking and creativity. The core of computing is computer science, in which pupils are taught the principles of information and processing and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology within the wider curriculum to support their learning. We aim for all pupils to become digitally literate and develop their ideas through information and communication technology. We ensure a high-quality focus on E-safety is embedded in all areas of computing. Our children will be safe, respectful and active participants in a digital world.	Computing is taught as a subject in its own right but also supports children's learning throughout the wider curriculum. Within computing lessons children learn to use a wide range of computing skills including: • Word processing to write stories, poems or letters • Databases to record information • Spread sheets to create tables, charts and graphs • Desktop publishing to design posters, leaflets or cards • Online safety and being good digital citizens • Digital camera (iPad) to record what they have done in class or on a visit • Computer coding (Espresso Coding or Scratch) to give instructions and make something happen • Programming Beebots to move on a 2-D grid • Using ipads for educational apps • Using the Interactive Whiteboard to drag, drop, draw and write.	Our computing curriculum is high quality, embedded in our wider curriculum and is planned to demonstrate progression. We measure the impact of our curriculum through the following methods: • Assessing children's understanding of topic-linked vocabulary before and after the unit is taught. • Summative assessment of pupil discussions about their learning • Images and videos of the children's practical learning • Interviewing the pupils about their learning (pupil voice) • Moderation at staff meetings where floor books are scrutinised and there is the opportunity for a dialogue between teachers • Annual reporting of standards across the curriculum Digital literacy is demonstrated through their competence in completing each unit of work. This will be documented in our whole School computing curriculum floor book. Summative assessment will be used to record attainment and areas for development. Online safety is assessed through formative assessment and pupil voice. Our computing curriculum ensures that children become digitally literate. They will be able to use, and express themselves and develop their ideas through information and communication technology. This will be demonstrated at a level suitable for the future workplace and as active participants in a digital world.

Parents' Guide to Computing

What is Computing?

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

Core vocabulary

Computing	
EYFS	Technology, purpose, application, record, range, code, input, E-safety
KS1	Code, input, output, icon, debug, digital, algorithm, public, private, application (app), safe, respectfully, E-safety
KS2	Code, input, output, icon, debug, digital, algorithm, logic, public, private, application (app), social media, sequence, network, variable, hardware, software, data, execute, safe, respectfully, E-safety

How can I help with Computing at home?

Computing is not just about using a computer. It also includes the use of tablets, game consoles, controllable toys, digital cameras and everyday equipment such as a digital recorder, DVD player, or Blu-Ray player. Children can be helped to develop their computing skills at home by:

- Writing a letter to a relative using a Word Processor
- Sending an email to a friend – discuss the importance of E-safety
- Drawing a picture on a screen. Dragging, dropping and drawing. Change the size, shape and colour of the pen etc.
- Using the Internet to research a class topic – discuss safe searching
- Planning a route with a controllable toy – programming
- Using interactive games
- Playing on an educational App on a tablet
- Discussing E-safety and who they can talk to if they are feeling worried/uncomfortable
- Coding on Espresso coding