



# Subject Overview - Computing

*Aim high & be a Star*

## Our curriculum

The curriculum is built on the foundation that knowledge will build on knowledge so that children know and remember more over their school journey. To achieve this, the curriculum must be grounded in educational research to ensure that it is a driver to success. The overview below states how our history curriculum achieves this.



## Teaching and Learning Cycle

The sunshine model outlines the effective delivery of information over the course of a lesson. It allows for recapping of prior knowledge; the sharing of information; the use of assessment to check understanding; the opportunity to practise whilst being supported through scaffolding and the review of learning which will inform the next steps in learning. This cycle of learning should be viewed alongside the Aspire values and Aspire learning skills.



## Purpose

At Greenways Primary Academy, we aim to provide a computing curriculum that is creative, inclusive, challenging and inspired by the real-world. We have adapted the curriculum created by the National Centre for Computing Education (NCCE), which is funded by the Department for Education with enhancements from Project Evolve. Our curriculum is enriched through the use of high-quality resources (provided by the NCCE to match their curriculum), programs and software. Our computing curriculum and the lessons we teach inspire future thinkers, innovators and problem solvers in an immersive environment that stimulates curiosity and supports high-quality learning, allowing each and every learner to fulfil their potential.



## Teaching and learning

A weekly slot is timetabled to ensure that access to the computing hardware is guaranteed for each class. The guidelines below are followed by each teacher:

- Computing is taught as a discrete subject (Year 1 to Year 6).
- The teaching of new DL (digital literacy)/IT (information technology) skills should be discrete (e.g. basic skills in using new software and/or equipment);
- Children should be given as many opportunities as possible to apply their CS (computer science), DL and IT skills across the curriculum and in creative ways (e.g. as an option to present work);
- The class teacher must ensure through careful planning and reviewing, that each learning objective from the CS and DL / IT curriculum is covered thoroughly and that CS and DL / IT are an integral part of the whole curriculum
- Opportunities should be given for learning to be both online and offline to ensure that concepts are fully understood.
- Planning must be centred on the needs of the pupils and designed to meet a range of differing needs, including those needing additional support.

## Resources and access

IT resources are accessed and deployed in a number of ways throughout the academy. This ensures the maximum amounts of resources are available and easily accessible to support delivery of an effective and powerful computing curriculum. At present we have access to a range of online and hardware platforms that allow all children full access to the curriculum intent.

A school network enables internet access to all devices in the academy building. The school network is secure and can only be accessed by user name and password. The network also offers access to a shared area in which documents are stored and accessed. Please refer to the E-safety, Acceptable Usage and Information Security policies for further details.



## Internet safety

Internet access is planned to enrich and extend learning activities throughout the curriculum. To enhance this offer, there are a number of planned activities across the year which build on e-safety as a subject such as Internet Safety Day. The academy has acknowledged the need to ensure that all pupils are responsible and safe users of the Internet and other communication technologies. We aim to provide a curriculum which includes education on how to stay safe online and when using other technology. We also offer a safe online environment through filtered internet access. Please refer to the Trust E-safety policy for further details.

## Assessment

Effective assessment is critical to teaching because it provides teachers with information about pupils' understanding and needs. Teachers will plan formative assessment tasks linked to lesson objectives and will draw conclusions about what pupils have learned by looking at patterns of performance over time. At the end of each unit of learning, teachers will make a judgement, which will begin to build a picture of a pupil's competency in the subject content.

The academy will present to parents, for discussion, an annual written report on each pupil involved in Key Stage 1 and Key Stage 2.

Assessment of the children's work and their acquisition of knowledge will be made using:

- Written work.
- Low stake quizzing.
- Engagement with disciplinary content
- Evaluating patterns of performance over time.
- Questions and answers.
- Structuring tasks and questions to enable the identification of knowledge gaps and misconceptions.
- Discussion between individual children and teacher observation.