COMPUTING AT CALTON PRIMARY SCHOOL

Our Computing curriculum ensures that children use technology creatively to support and enrich their learning across the curriculum whilst learning new skills

BIG IDEAS

- **Programming and Computational Thinking:** Planning, writing and testing computer programs for digital devices, from floor turtles to tablets. Using algorithms, logical reasoning and decomposing problems into smaller parts.

- **Creativity and Productivity:** Creating and refining original content using digital tools across a range of media. Collecting and analysing data and information using computers; organising, manipulating and presenting this to an audience.

- **Computer Networks, Communication and E-Safety:** Using and understanding the internet, the web and search engines, effectively and safely. Making the most of computers and the internet for communicating with one or many and working together on projects.

CONTENTS AND SEQUENCING

- Themes are explored in a variety of ways using a range of technologies. Each year group has the Rising Stars scheme of work to follow and each unit has been adapted to fit in with the themes each term.

- Each subject area: programming, computational thinking, creativity, productivity, computer networks, communication and e-safety (Digital Futures) are built on year on year referring to previous skills learnt and extending knowledge.

- Children are encouraged to look at the work of others online and to use this knowledge to help them create work as part of a team. Children are then encouraged to look at how they may improve their work.

- Children are encouraged to think about how they interact with each other and other people online. They are taught how to stay safe online and how to report any problems that they have in a safe way.

LINKS WITH MATHS AND ENGLISH

Maths and English links, as well as links with other subjects, are listed for each year group throughout the scheme of work.

The connections with Maths and English are made explicit for each unit but maybe more obvious for some units.

The connection between Computing and Maths is recognised throughout the curriculum.

RETRIEVAL SCALE

Programmes and vocabulary are used repeatedly to ensure that knowledge that has been gained is transferred into the long term memory.

Step by step progression of skills and knowledge for each computing area is included with the scheme of work we use.

Skills and knowledge is built on year on year and the knowledge gained in previous units is used to support the use of new software.

PROGRESS

The Computing curriculum is a purchased scheme of work that has been carefully sequenced so that prior knowledge and skills are recapped and built upon from previous year groups leading to increased knowledge of computing skills.

Connections are made throughout the unit, connecting previous knowledge and other programmes with the programmes being studied.

SUPPORT

Everyone has access to the Computing National curriculum.

Some children have further guidance from the teacher to access the learning effectively. Peer and self assessment techniques used to develop thinking.

Some children are mentored with mind-set techniques to develop resilience and perseverance in Computing.