



Computing at Wren's Nest Primary School

In the 21st Century, computing skills are an essential requirement for everyday life. It ensures that children are digitally literate so they can successfully communicate their ideas through information and communication technology. At Wren's Nest, computing skills are used across the curriculum, whether it is presenting data from a science experiment or creating a historical report. Through careful sequencing of lessons, our curriculum is designed to inspire children to find out more about the digital world, see its place in the future and be confident when using and applying it. In addition to this, it is vital that children know how to use modern technology in a safe, responsible way.



Big Ideas

Computer Science

- ✓ Algorithms
- ✓ Debugging
- ✓ Reasoning
- ✓ Designing
- ✓ Programming
- ✓ Coding

Information Technology

- ✓ Organisation
- ✓ Data
- ✓ Software
- ✓ Internet
- ✓ WWW

Digital Literacy

- ✓ On-line Safety
- ✓ Email
- ✓ Search and retrieval



Content and Sequencing

- ✓ **EYFS** - Children recognise that a range of technology is used in school and at home. They begin to use technology for different purposes.
- ✓ **Years 1 and 2** - Children can begin to explain that an algorithm is a set of instruction to complete a task. They show some awareness that algorithms need to be precise, designing and debugging logical, programmable steps. Children demonstrate the ability to organise data using a database and know the implications of inappropriate online searches. They develop an understanding of email and sharing electronic files.
- ✓ **Years 3 and 4** - Children turn real life situations into algorithms considering the repetition of the code. They structure programs in logical steps and begin to identify errors in their coding. Children build an appreciation for the functions of different web pages and consolidate their understanding of 'being safe' and the procedures required of reporting inappropriate content.
- ✓ **Years 5 and 6** - Children work with more complex algorithms, testing and debugging their programs, identifying the cause of bugs using a systematic approach. They have a good understanding of the World Wide Web and the differences to the internet. They know what a WAN and LAN are and how they access these features. Children can use filters to narrow a search making it more efficient and design their own media pages. They recognise why it is important to preserve their privacy, thinking about their own and other people's safety.



Cross curricular links

- ✓ Direct links with:
 - History
 - Maths
 - Literature
 - PSHE
 - Science
 - Geography
- ✓ Wren's Nest Schema Webs of Food, Fashion and Technology.



Retrieval

- ✓ Quizzes
- ✓ Tasks and activities
- ✓ Big Questions
- ✓ Purple Mash - online resource
- ✓ School website - a hub for teaching and learning resources including Teacher videos.



Progress

- ✓ Formative assessments
- ✓ Work produced by the children
- ✓ Content mapping of the skills and knowledge of the curriculum
- ✓ Increase in the use of technical vocabulary, knowledge, and skills
- ✓ Transfer of skills across the curriculum



Support

- ✓ Inclusion for all children.
- ✓ Children in provision sets to access strength lessons in year groups
- ✓ Groups across school
- ✓ Adult support in the classrooms
- ✓ EdTech Demonstrator Programme
- ✓ Key vocabulary within each unit of work
- ✓ Purple Mash
- ✓ High quality resources, up to date hardware
- ✓ Digital devices differentiated for age, ranging from iPads to Chromebooks
- ✓ Staff CPD