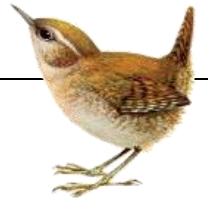
Computing at Wren's Nest Primary School



In today's digital world, computing is more than just a skill – it's a vital part of everyday life. At Wren's Nest, we empower children to become digitally literate, equipping them to express their ideas confidently through information and communication technology. Computing is woven throughout our curriculum, whether pupils are analysing scientific data or crafting historical reports. Our thoughtfully sequenced lessons spark curiosity about the digital world, highlight its relevance to the future – including emerging technologies such as artificial intelligence – and build pupils' confidence in using technology effectively. Just as important is teaching children to navigate the online world safely and responsibly. Online Safety is a consistent theme across all computing lessons and is also taught as a dedicated unit to reinforce key principles.

Big Ideas

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

Information Technology
- ✓ Organisation
- ✓ Data
- ✓ Software
- ✓ Internet
- ✓ WWW
- ✓ Networks

Digital Literacy
- ✓ Online 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 (no specific mention of IT in development matters)
- ✓ **Years 1 and 2** – Children learn to recognise and use technology responsibly, create and edit digital content, write simple programs, and understand how to collect and present data. They explore how computing links to everyday life, compare digital and non-digital methods, and use logical reasoning to solve problems. Through creative projects such as digital art, music and storytelling, they develop early programming skills and begin to understand how technology can be used to communicate, create and explore.
- ✓ **Years 3 and 4** – Children develop a deeper understanding of how digital devices and networks work, including the internet and online content. They create and edit digital media such as animations, podcasts and documents for specific purposes. Pupils build on programming skills using block- and text-based languages, exploring events, loops and algorithms. They learn to collect, analyse and present data, use branching databases, and consider the ethical use of content, including copyright and evaluating online information.
- ✓ **Years 5 and 6** – Children build advanced digital skills by planning and creating digital content such as films, web pages and 3D models. They explore data handling through databases and spreadsheets, and develop programming skills using selection, variables and physical inputs. Pupils investigate how IT systems and the internet work, including how data is transferred and how to collaborate online. They also consider copyright, design and functionality when creating digital products for real-world purposes.

Cross curricular links

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

Retrieval

- ✓ Quizzes
- ✓ Tasks and activities
- ✓ Big Questions
- ✓ NCCE Teach Computing – online resource
- ✓ School web site – 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 access full, balanced curriculum in sets or in year groups
- ✓ Groups across school
- ✓ Adult support in the classrooms
- ✓ EdTech Demonstrator Programme
- ✓ Key vocabulary within each unit of work
- ✓ NCCE
- ✓ High quality resources, up to date hardware
- ✓ Digital devices differentiated for age, ranging from iPads to Chromebooks
- ✓ Staff CPD