# Computing

Technology enables us to code, create and connect.

## The Elements of Computing

| Computational Thinking & Coding | Creating and Communicating | Online Safety |
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## Children Will Learn Component Skills and Knowledge

(Substantive and factual knowledge , topic specific vocabulary and procedural knowledge for Computing)

| Computational Thinking Skills | Presenting Digital Work | Evaluating and Making Choices |
|---|---|---|
| Logical Reasoning<br>Predicting and analysing<br>Algorithms<br>The process for getting things done<br>Pattern Spotting<br>Spotting and using similarities<br>Decomposition<br>breaking down into parts<br>Abstraction<br>Choosing what's important<br>Debugging<br>Finding and fixing errors<br>Evaluating<br>Making judgements | Saving and Retrieving<br>Typing, Touch Gestures and Mouse Skills<br>Research by searching and selecting<br>Image—photography, drawing, modelling<br>Video—capture and edit for audience<br>Sound Engineering—record and edit for audience<br>Data Handling—using spreadsheets, tables and graphs | Privacy and Security<br>Online Bullying, Relationships and Well -Being<br>Digital Footprint and Reputation<br>Creative Credit, Copyright and Quality |

## Composite Knowledge and Skills

(Software and concept specific language and terminology, the Swift programming language)

| Everyone Can Code Curriculum | Create and Communicate Curriculum | Online Safety Curriculum |
|---|---|---|
| **Coding Skills:**<br>Sequencing<br>Iteration<br>Event Handling<br>Conditional Statements<br>Variables | Children communicate their ideas in digital artefacts, showing their composite knowledge and skills. They answer enquiry questions by publishing using:<br>Pages for Digital books<br>Pages/Word for Word processing<br>Keynote/PowerPoint for Slide show presentations<br>Numbers/Excel for Spreadsheets<br>GarageBand for Podcasts<br>Clips and iMovie for Films | Children show understanding of online safety when they come together to discuss ways to solve problems that may arise in their personal lives.<br>Online Safety is taught in the first lesson of half term but also through other subject areas, such as PSHE and RSE.<br>Whole school online safety assemblies are planned by the Computing Leader at the end of each half term. |

Because the Computing Curriculum is progressive, what early on is composite knowledge and skills could become a component part of more complex learning later on.