

Computing at Catshill Federation	Why is this subject important?	How is Computing organised?
<p>Our Computing curriculum prepares all our children for the ever changing world of technology and enables children to become digitally literate, thus readying them for the future workplace.</p> <p>Computing unlocks so many opportunities and we encourage our pupils to strive for their own career aspirations, showing them how computing at school can support that journey.</p> <p>We have a strong ethos of online safety, ensuring our children know how to report things that upset them, and how to keep themselves and others safe. We teach pupils about their responsibility for the online safety of others. They will know how what they post online affects others and to always THINK before posting.</p> <p>At CFSN pupils access computing through a range of technologies, including iPads, beebots, classroom PC and Chromebooks.</p> <p>At CMS pupils are able to use a well resourced computer suite, giving them access to a large range of software including Google Suite.</p>	<p>We aim to provide resources and develop skills that will serve pupils well as they progress in life; we want pupils to become confident, capable digital leaders and use their skills effectively. Our Computing curriculum is varied and links to other areas of learning to encourage pupils to put what they have learned into practice.</p> <p>In an increasingly digital society, computing skills are essential for a wide range of careers, from software development and data analysis to engineering, design, and the creative industries.</p> <p>By introducing pupils to computing concepts early, we ignite their curiosity and confidence in technology, laying the groundwork for future opportunities in STEM-related fields. As the UK faces a growing demand for digitally skilled professionals, a robust computing curriculum ensures pupils are prepared to contribute to and thrive in the future workforce.</p>	<ul style="list-style-type: none"> • In the Early Years Foundation Stage (EYFS), Computing is introduced through PSED and communication activities. The children learn to sequence pictures, sounds and instructions. • In KS1, pupils learn to log in to chromebooks using their class (Y1), then personal (Y2) ID, and understand the online safety issues related to this. They begin to save and retrieve their work, developing typing and image manipulation. They learn to debug algorithms and make predictions using physical computing (Beebots). • In lower KS2 children develop computer science using Scratch and Turtle Playground. They learn to write their own algorithms and set challenges for others. We also have regular online safety lessons to ensure pupils are able to access the internet safely and know how to protect themselves and others. • Upper KS2 and KS3 pupils have a 1 hour session per week in the computer suite. Pupils log in to their own school Google accounts. • Any further software is available on the PCs or via the internet. Some online software is logged into using the pupils Google account information.
How are other subjects linked?	How is the curriculum adapted?	How is progress measured?
<p>Computing naturally integrates with other subjects, enriching learning and promoting interdisciplinary understanding:</p> <ul style="list-style-type: none"> • Mathematics: Pupils use logical reasoning, algorithms, and pattern recognition in coding and problem-solving. • Science: Data logging, simulations, and computational models support scientific enquiry. • Design and Technology: Pupils apply their programming skills to create functional products, including robots and automated systems. Pupils also create 3D computer models. • English: Digital storytelling and multimedia presentations enhance communication skills. • Art: Pupils use graphic design software to create digital artwork, fostering creativity through technology. • PSHE and Online Safety: Computing lessons address digital citizenship, online safety, and the ethical use of technology. 	<ul style="list-style-type: none"> • Vary task complexity: Offer tasks at different difficulty levels, from basic understanding to higher-level problem-solving. • Scaffold learning: Provide step-by-step support for complex tasks, reducing cognitive load as pupils progress. • Use peer support: Encourage collaboration, allowing students to work in pairs or groups with varying skill levels to support each other. <p>Pupils using technology have access to a range of tools to support their learning.</p> <ul style="list-style-type: none"> • Text-to-speech or speech-to-text: Support pupils with reading or writing difficulties. • Screen readers: Ensure visually impaired students can access content. • Visual learners: Use diagrams, flowcharts, and video tutorials. • Auditory learners: Provide podcasts, oral instructions, and group discussions. • Kinaesthetic learners: Incorporate hands-on coding activities, 	<ul style="list-style-type: none"> • Regular teacher assessment: these are based on activities and tasks within lessons. • Projects and Tests: Some units have tests and final projects to allow teachers to assess pupils' knowledge and skills. • Educater: Teachers assess pupils using Educater. Subject leaders can then analyse group data and discuss interventions and support with teachers. • Alternative assessment types: Use project-based assessments or oral presentations instead of traditional written exams, allowing for diverse methods of demonstrating skills.

- **Music:** units within the computing curriculum allow pupils to create and edit music

interactive software, or physical computing tasks (e.g., Raspberry Pi)..

- **Real-world scenarios:** Engage students in solving practical computing problems (e.g., developing apps for local businesses, creating websites for charity organizations).