



# Computing

## At Fawkham CEP School



### Intent:

At Fawkham we provide a quality computing education that equips children to use computational thinking and creativity to understand and change the world, gaining independence, confidence and enjoyment along the way. Along with the discrete teaching of computing, we use computing to enhance other curriculum areas, using technology to support learning across the entire curriculum and ensuring our curriculum is accessible to every child. The majority of children at Fawkham are fortunate enough to have access to a range of technology within their home settings allowing them to develop a range of skills which we then build upon through our computing curriculum. Computing at Fawkham ensures that children become digitally literate – at a level suitable for the future workplace and as active participants in a digital world. Not only do we aim for our children to be digitally literate users of technology, but throughout computer science lessons we want them to develop resilience, problem-solving and critical thinking skills.

Here at Fawkham, we have chosen to use a scheme of work from Teach Computing. This ensures a broad and balanced curriculum which shows clear progression of skills, knowledge and understanding through the areas of Computer Science, Information Technology and Digital Literacy. These are categorised into 10 strands outlined within the Teach Computing Taxonomy, including: Networks, Creating Media, Data & Information, Design & Development, Computing Systems, Impact of Technology, Algorithms, Programming, Effective Use of Tools and Safety & Security.

Our E-ambassador, child leadership team have highlighted that internet safety was an issue for some children in our school and this scheme suits the needs of our children as it incorporates regular internet safety lessons. In addition, we will use internet safety plans from Project Evolve to enhance these internet safety lessons. These activities will be woven throughout our computing curriculum as starter activities within each lesson as well as whole lessons incorporated into the unit of teaching with the aim of embedding and reinforcing the key online safety messages taught within our RSE/PSHE curriculum.

Year	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
<b>Year R</b>	*Children in EYFS will have access to a range of technology to explore through their play. They will have access to a range of hardware including an IWB and tablets to complete simple programmes. They will be able to make choices and select different technology for a purpose.					
<b>Year 1</b>	<b>Computing systems and networks</b>  Technology around us DL & IT  Internet Safety – Teach Computing	<b>Creating media</b>  Digital painting IT  Internet Safety – Project Evolve (Online Relationships)	<b>Programming A</b>  Moving a robot CS & DL  Internet Safety – Project Evolve (Privacy and Security)	<b>Data and information</b>  Grouping data DL & IT  Internet Safety – Teach Computing	<b>Creating media</b>  Digital writing DL & IT  Internet Safety – Teach Computing	<b>Programming B</b>  Programming animations CS & IT
<b>Year 2</b>	<b>Computing systems and networks</b>  Information and technology around us DL & IT  Internet Safety – Teach Computing	<b>Creating media</b>  Digital photography DL & IT  Internet Safety – Teach Computing Internet Safety – PSHE curriculum	<b>Programming A</b>  Robot algorithms CS & IT  Internet Safety – Project Evolve (Online Reputation)	<b>Data and information</b>  Pictograms DL & IT  Internet Safety – Teach Computing Internet Safety – PSHE curriculum	<b>Creating media</b>  Making music IT  Internet Safety – PSHE curriculum	<b>Programming B</b>  Programming quizzes CS  Internet Safety – Project Evolve (Copyright and Ownership)



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<b>Year 3</b>	<b>Computing systems and networks</b>  Connecting computers CS & IT	<b>Creating media</b>  Stop frame animation DL & IT  Internet Safety – Teach Computing Internet Safety – PSHE curriculum	<b>Programming A</b>  Sequencing sounds CS & IT	<b>Data and information</b>  Branching databases IT  Internet Safety – Project Evolve (Online Reputation)	<b>Creating media</b>  Desktop publishing IT	<b>Programming B</b>  Events and actions in programs CS & IT  Internet Safety – PSHE curriculum
<b>Year 4</b>	<b>Computing systems and networks</b>  The internet DL & IT  Internet Safety – Teach Computing	<b>Creating media</b>  Audio production DL & IT  Internet Safety – Teach Computing Internet Safety – PSHE curriculum	<b>Programming A</b>  Repetition in shapes CS & IT	<b>Data and information</b>  Data logging CS & IT  Internet Safety – Project Evolve (Copyright and Ownership)	<b>Creating media</b>  Photo editing DL & IT  Internet Safety – Teach Computing	<b>Programming B</b>  Repetition in games CS  Internet Safety – PSHE curriculum



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<b>Year 5</b>	<b>Computing systems and networks</b>  Sharing information CS & DL & IT  Internet Safety – Teach Computing	<b>Creating media</b>  Video production DI & IT  Internet Safety – Teach Computing Internet Safety – PSHE curriculum	<b>Programming A</b>  Selection in physical computing CS & IT	<b>Data and information</b>  Flat-file databases IT  Internet Safety – Project Evolve (Online Bullying)	<b>Creating media</b>  Vector drawing IT	<b>Programming B</b>  Selection in quizzes CS & IT
<b>Year 6</b>	<b>Computing systems and networks</b>  Internet communication CS & DL & IT  Internet Safety – Teach Computing Internet Safety – PSHE curriculum	<b>Creating media</b>  Webpage creation DL & IT  Internet Safety – Teach Computing Internet Safety – PSHE curriculum	<b>Programming A</b>  Variables in games CS & IT  Internet Safety – PSHE curriculum	<b>Data and information</b>  Introduction to spreadsheets IT  Internet Safety – PSHE curriculum	<b>Creating media</b>  3D modelling DL & IT  Internet Safety – Teach Computing	<b>Programming B</b>  Sensing CS & IT