Our Curriculum for Computing

Meersbrook Bank Community Primary School

Aims

At Meersbrook Bank we aim to ensure that all pupils:

- **can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation**
- **can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems**
- **can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems**
- **are responsible, competent, confident and creative users of information and communication technology.**

Computing Scheme of Work (Sheffield)						
Year	**Autumn I**	**Autumn II**	**Spring I**	**Spring II**	**Summer I**	**Summer II**
FS2	<u>We Control Technology</u> 1a - What is a Computer? 1b - We Control Technology 1c - Tinkering: Bee-Bots		<u>Communication: Multimedia</u> 2a - Digital Art 2b - Sound & Music 2c - Photographs 2d - Films & Animation 2e – eBooks		<u>Communication: Data</u> 3a - Counting 3b – Sorting	

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	Strand 0 Key Skills	Strand 1 Communicating: Text and Images	Strand 4 Programming A	Strand 2 Communicating: Multimedia	Strand 5 Programming B	Strand 3 Understanding and sharing data
Y1	• What is a computer? • Mouse and Keyboard skills • Logging on • Opening & saving work • Organising files • Searching for information	How do I use the school computer independently?	What is an algorithm?	How do I record sounds and pictures?	What is a program?	How do I present data using pictures?
Y2	• What is a computer? • Mouse and Keyboard skills • Logging on • Opening & saving work • Organising files • Searching for information	How do I use a computer as a writer?	How do I improve my algorithms?	How do I create a multimedia story?	How do I improve my programs?	What is a branching database?

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Y3	• What is a computer? • Mouse and Keyboard skills • Logging on • Opening & saving work • Organising files • Searching for information	How do I use a computer as an artist?	How do I use repetition in programs?	How do I use a computer as a musician?	How do I use forever loops in programs?	How do we use databases to find out information?
Y4	• What is a computer? • Mouse and Keyboard skills • Logging on • Opening & saving work • Organising files • Searching for information	How do I use a computer as an artist?	How do I write efficient programs?	What makes and excellent multimedia story?	How do I use selection in a program?	How is data shared online?

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	Strand 0 Key Skills	Strand 1 Communicating: Text and Images	Strand 4 Programming A	Strand 2 Communicating: Multimedia	Strand 5 Programming B	Strand 3 Understanding and sharing data
Y5	• What is a computer? • Mouse and Keyboard skills • Logging on • Opening & saving work • Organising files • Searching for information	How do we collaborate online?	How do I program physical systems?	How do I create a radio advert?	How do I use variables in programs?	How do I find and share data safely and responsibly?
Y6	• What is a computer? • Mouse and Keyboard skills • Logging on • Opening & saving work • Organising files • Searching for information	How do I use a computer as a designer?	How do I build complex physical systems?	What makes an excellent film?	How do I design complex programs?	Why do we use spreadsheets?