

# MVFS Computing Curriculum

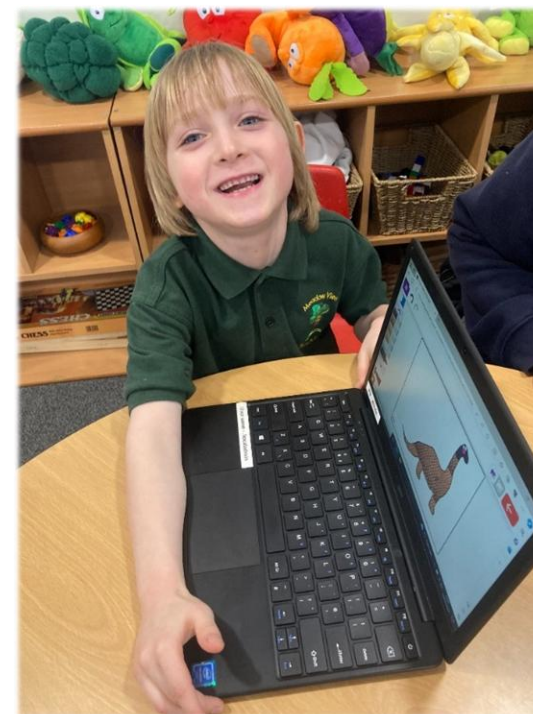
## Intent

At MVFS we appreciate that becoming computer literate is increasingly important in enabling our children to be confident, creative and independent learners; and we acknowledge that the younger generation will rely heavily on their digital literacy and skills in order to accomplish many career goals. As such, it is our intention to provide a wide range of experiences and opportunities to help them achieve this. We want our children to understand the potential of technology, and to start to build a repertoire of useful computing skills for their future.

Whilst we want our children to become digital users and creators (using technology efficiently to support their learning and lives), we also want them to understand the potential impact of being digital consumers (on their time, relationships and wellbeing). Indeed, as well as the huge potential of technology, we teach our children to understand the challenges and problems it can cause. We enable our children to become good digital citizens: to know how to stay safe and keep others safe online, to be aware of the need to be a critical thinker and consider the accuracy of what they see online and in mainstream and social media, and the importance of carefully controlling what they share so that they can ultimately manage and maintain their own digital footprint.

## Our Key Aims: At MVFS, we strive to...

- empower our children to keep themselves safe in an increasingly digital, online society.
- promote an understanding of how technology plays a role in most aspects of modern life; considering the benefits and potential challenges that this can bring.
- provide a safe space in which our children can learn to navigate and interact with the digital world, whilst exploring their own personal expression and identity.
- develop resilient, reflective and creative approaches to using technology; to enable our children to enhance their learning and their lives, and to solve problems.
- enable our children to find, explore, analyse, exchange and present information in thoughtful and effective ways.
- develop the skills to use technology to communicate in a range of ways; including combining text and images, and recording and editing sounds and motion pictures.
- develop the skills to control technology in a purposeful way to achieve a goal, evaluating progress and remaining resilient when actions need to be reviewed or refined.



## Implementation

At MVFS we have devised a bespoke curriculum which is carefully sequenced and interconnected; and which enables our children to develop their knowledge and understanding of computing and digital technology as they move through our school. Our Computing Curriculum is organised in a two year cycle, with topics of study being reviewed collaboratively by our teaching team at the end of each cycle. As the children acquire and develop new skills, they are also provided with opportunities to apply them across the curriculum, and are supported in using digital technology to safely follow their own interests.

As with all areas of our curriculum, it is important to remember that all of our children have significant gaps in their learning due to the experiences that have brought them to MVFS – indeed, all of our children have not been able to access the full curriculum for at least a year before joining us. As explained in our Curriculum Policy, this means that many of our children are working at a level below their chronological age whilst we support them to re-engage with education and enjoy high levels of interest and success, which help them to rebuild their self-esteem and start to value their own social and academic achievements.

### Stage One:

- As most of our children routinely use online devices to play games and watch videos at home, in Stage One our children start by learning about the potential dangers of using the internet; and how they can keep themselves safe. As part of our Protective Behaviours programme, we introduce the children to CEOP's SMART code. The children learn that not everything they see online can be trusted, and how to react and report their concerns if anything online makes them feel uncomfortable, upset or frightened. As they start to build their computing skills, children learn how to combine and edit text and images to present information to an audience; and how to record, retrieve and edit sounds. They also learn how to program a short sequence of instructions on a Bee Bot, and begin to explore coding and creating simple algorithms.

### Stage Two:

- In Stage Two our children deepen their knowledge of how to stay safe online by looking at cyber bullying (including exploring the social and legal outcomes for perpetrators); and they begin to understand that we all leave a 'digital footprint' when we go online. These children develop their publishing skills by learning how to incorporate additional features into their documents; and begin to experiment with stop motion animation. They also continue to develop their coding skills, using a wider range of commands to achieve more complex goals.

### Stage Three:

- Stage Three builds securely on the previous stages. In their continued learning about E-safety, the children find out about the potential risks of e-commerce, and about their rights and responsibilities as a digital citizen. The children develop their knowledge and skills in using common software applications, such as MS Word; and they become increasingly confident in using word processing to communicate effectively across the curriculum. They use increasingly complex algorithms to achieve output goals, and are encouraged to evaluate their coding and consider if their process can be improved.

## Computing – Cycle A

	Stage 1	Stage 2	Stage 3
PSHE	Digital Wellbeing	Digital Wellbeing	Digital Wellbeing
Block 1		Coding	
Block 2	Maze Explorers		Databases
Block 3		Branching Databases	
Block 4	Music Makers		Game Creator

## Computing – Cycle B

	Stage 1	Stage 2	Stage 3
PSHE	Digital Wellbeing	Digital Wellbeing	Digital Wellbeing
Block 1	Grouping & Sorting		
Block 2		Animation	3D Modelling
Block 3	Creating Pictures		
Block 4		Logo	Binary

In addition to the units studied above, each class takes part in Computer Club for half a term each year. This weekly club is led by our Computing Subject Leader – giving them the opportunity to directly teach every child in school during the course of the year, and to broaden and deepen the children’s knowledge and skills.

## Impact

Through our bespoke approach and quality first teaching, we will see the impact of this subject in different ways. Our children will be engaged in lessons and know how to keep themselves safe when interacting with the digital world. They will be able to talk about and demonstrate the knowledge, skills and vocabulary that they have acquired; and will show increasing levels of understanding and critical thinking when using technology to communicate information and carry out coding activities.

Evidence collected will show that a range of topics are being covered, and that our children are developing a broad range of computing skills which they can apply to enhance their learning across the curriculum. Ultimately, our children will develop a sense of their responsibilities as a digital citizen, and build a strong base of skills which will support them with learning, life and future career choices.