

Computing at RMJS

Technology enables to code, create and connect

The Four Elements of Computing

Computer Science	Information Technology	Digital Literacy	E-Safety
Knowledge and Understanding			
Substantive Knowledge: The facts, information and vocabulary that are needed to understand Computing Knowing that... Understanding that...		Disciplinary Knowledge: The procedural skills that are needed to use technology effectively Knowing how to ...	
Children show understanding of computational thinking and coding concepts when they get to tinker with programming software and robotics. Pupils have time to apply what they have learned in open exploration with block-based code and/or robotics play.	Children use technology purposefully and effectively to create, organize, store, manipulate and retrieve digital content. Children use a variety of software on a range of digital devices to design and create programs, systems and content to achieve a goal. Children learn to analyse and evaluate data and information.	Children use technology safely and responsibly. Showing an understanding of the uses of information technologies outside of school. They evaluate digital content and understand the opportunities that digital literacy offers for communication and collaboration.	Children show understanding of online safety which is taught as a thread during computing lessons but also through Jigsaw/PSHE lessons. Whole school online safety assemblies are delivered when appropriate and bespoke teaching takes place if safety problems arise.

The Skills our Pupils Will Learn

Computer Science	Information Technology	Digital Literacy	E-Safety
<ul style="list-style-type: none"> Designing and sequencing algorithms Event handling Computational thinking and logical reasoning Pattern spotting Decomposition Debugging Evaluation Understanding databases Understanding cryptography 	<ul style="list-style-type: none"> Word processing Creating and using spreadsheets Creating digital images Photo and photo editing Video and animation Creating 3D graphic models Recording and audio editing when podcasting 	<ul style="list-style-type: none"> Understanding the Internet and the World Wide Web Computer systems and networks Using search engines effectively to research online Combining media to present information 	<ul style="list-style-type: none"> Understanding that there are benefits and risks to using the internet Understanding what personal information is Understanding how to speak to others online Understanding the importance of permission when it comes to sharing and using information/pictures Understanding what to do when something goes wrong Identifying adults who can help Understanding how to act safely and responsibly