





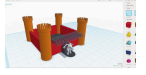










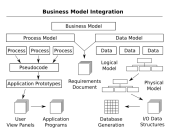








Computing at Catshill Middle School

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. At CMS pupils are able to use a well resourced computer suite, giving them access to a large range of software including Google Suite.

Year 5	Computer Systems 	Presentations 	Image Manipulation 	Vector Graphic Basics	Word Processing 	Block Coding A 
Curriculum focus	Systems Around Us Pupils learn to log on to CMS, use Drive and Mail, and explore ePortfolios. They also study how computer systems operate and are used in everyday life. 	Fact-Files Pupils use Google Slides to create an interactive fact file, adding links for non-linear navigation rather than a simple click-through slideshow.	Paint.Net Learners will develop their understanding of how digital images can be changed and edited, and how they can then be resaved and reused.	Google Drawings Pupils learn to create images using shapes, exploring basic drawing tools such as copy and paste, zoom, and layering. They apply these skills to produce a range of simple shape-based images.	Creating a Digital Encyclopedia Pupils learn how to use the built in features of Google Docs to create a digital book. Pupils learn to add images, drawings and front covers. Pupils also learn how to create an interactive Contents Page.	Repetition in Games Learners look at the difference between count-controlled and infinite loops, and use their knowledge to modify existing animations and games using repetition.
Year 6	3D Modelling 	Block Coding B 	Block Coding C 	Network Basics 	Databases 	Creating Media 
Curriculum focus	Tinkercad Learners will develop their knowledge and understanding of using a computer to produce 3D models.	Variables in Games This unit explores the concept of variables in programming through games in Scratch."	Selection in Quizzes Pupils build on their understanding of selection by revisiting conditional statements and learning to use the If... Then... Else structure in programs.	Communication & Collaboration Learners explore how data is transferred over the internet, starting with addressing and then examining the structure of data packets.	Flat-file Databases This unit looks at how a flat-file database can be used to organise data in records. Pupils use tools within a database to order and answer questions about data.	Audio Production Learners plan and create a podcast on the theme of Staying Safe Online, using Audacity to record and edit sound clips.
Year 7	Programming Essentials Pt1 	Network Fundamentals 	Programming Essentials Pt2 	Vector Graphics 	Creating Media 	
Curriculum focus	Sequence and Selection This unit, along with P.E 2, develops learners' confidence and understanding of key programming constructs, including sequencing, variables, selection, and count-controlled iteration.	From Semaphore to the Internet This unit begins by defining a network and addressing the benefits of networking, before covering how data is transmitted across networks using protocols.	Iteration and Subroutines Learners will build on their understanding of the control structures' sequence, selection, and iteration (the big three), and develop their problem-solving skills.	Vector Graphics This unit offers learners the opportunity to design graphics using vector graphic editing software. By the end of the unit learners will have produced an illustration, a logo, or some icons using vector graphics.	Web Design Pupils learn how to design a webpage for a particular audience, considering the needs of the audience and good and bad design	
Year 8	Data Modelling 	Mobile App Development 	Text based Programming 	Computer Systems 	Final Project 	
Curriculum focus	Spreadsheets Introduce your learners to the wonderful world of spreadsheets and the concept of cell referencing. Ask them to collect, analyse, and manipulate data, before turning it into graphs and charts.	Creating a Product Pupils learn to code a mobile app to meet the needs of a customer. Pupils choose one project from a range of projects provided. The pupils will learn to code the app in Java Script, using a block based approach. Pupils will consider the design criteria for the app and the audience the app would be for.	Introduction to Python This unit introduces learners to text-based programming with Python. The lessons form a journey that starts with simple programs involving input and output, and gradually moves on through arithmetic operations, randomness, selection, and iteration.	Layers of Computer Systems This unit takes learners on a tour through the different layers of computing systems: from programs and the operating system, to the physical components that store and execute these programs, to the fundamental binary building blocks that these components consist of.	Using ICT for Good Pupils use the skills and knowledge they have gathered during their studies to complete a range of task with a theme of 'Using ICT for Good'	
Beyond CMS	Having completed Year Eight at Catshill Middle School the vast majority of pupils move on to local High Schools. They join pupils from a number of other schools and continue their computing learning journey through the high schools' curriculums.					