



## Computing Curriculum

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 5 (1 hour a week)	<b>Introduction to computer systems</b> Children learn what a basic computer system is and their common uses while being introduced to our school computer network.	<b>Spread Sheets Business Budgeting</b> We get introduced to the world of business by setting up our own Pizza Takeaway company. The children learn how to use formulas to solve calculations.	<b>The History of Computers</b> Who invented the computer? We explore the diverse history of the computer by looking at consoles and code breakers in the war.	<b>Programming with Scratch</b> As our first introduction into the world of programming we look at two websites that allow us to create basic visual programmes.	<b>Digital Photography and Creative Comics</b> We will be using the tablets and photo editing software to transport the children into their very own comic world.	<b>2D Animation</b> During this topic the children will learn the history of animation and find out how computer systems can help in the process, while creating their own 2D animations.
Year 6 (1 hour a week)	<b>Computer Networks</b> We all use the internet so often but do we really understand it? During this topic children will learn the basic hardware needed to create the internet and how information is transferred.	<b>Spread Sheets Conditional Formatting</b> This year we find ourselves owning a brand new theme park. By using Excel, children will learn how to use formulas and conditional formatting to make the most profit possible.	<b>Input and Output Devices</b> Children will learn the differences between and input and output device and use this knowledge to design, build and test their very own games controllers.	<b>Programming with Kodu</b> After learning to make our own controllers it makes sense that we learn to make our own games. Children will be building their own 3d racing games.	<b>Multimedia using Green Screen technology</b> Year 6 will be using tablets and green screen technology to create their very own news reports about a subject that's close to their hearts.	<b>Programming with Scratch.</b> Children continue to learn about programming with Scratch with the introduction to variables and 'If' 'Else' functions.
Year 7 (1 hour a week)	<b>App Permissions and Online Safety</b> With children using mobile technology so much at home it is important that we know how to be safe when sharing images. We look into the 'permissions' we give the apps we use.	<b>Data Handling Access</b> How do apps like Netflix keep track of their customers? Year 7 learn how to build and query databases to run their own video club.	<b>Programming with Python</b> This will be the children's first experience of a text based programming language. We will use Python to create an artificial intelligence program.	<b>Computer Hardware and Operating Systems</b> What is an operating system? Why are they needed? Children learn how different computer systems require different OS's to function and also the names of key components.	<b>Programming HTML</b> Year 7 explore the secret code behind websites and learn how to create their own homepage using HTML code.	<b>Podcasting and Vlogs</b> Youtube has become a worldwide sensation and sharing media can be hugely beneficial but how can it be done? Children will be creating digital content for our website.
Year 8 (1 hour a week)	<b>Social Networking</b> Year 8 children are close to reaching the age to use social networking apps. We learn practical tips to staying private online while looking at real world examples using Edmodo.	<b>Computer Hardware and Design</b> Children learn the roles of the main components found inside of a computer system and attempt to design their own computer within a strict budget.	<b>Binary Code and Logic Gates</b> How are pictures and audio represented in a digital format? Year 8's will explore the world of Binary and Hexadecimal code to see how computers read information.	<b>Photo Editing and Digital Media</b> Cranborne needs to recruit new members to its computing course. Children use tablets and online photo editing applications to create unique and professional quality adverts for our school.	<b>APP Development Project</b> Children use apps all the time but do they have any idea how they are created? We will be working as part of a group to design, create, publish and market our own apps. Who's will be the most downloaded by the end of the term?	