



The curriculum for this stage of students' education has been designed to build upon their prior knowledge of maintaining safe and respectful use of a range of on-line activities including social media and collaborative working platforms. The expectation that throughout extending learning of existing applications and learning new applications students will continue to develop good working practices relating to file saving, sharing and backing up both in the Cloud and on the network. This is building up from a KS2 curriculum that is heavily weighted to computer programming rather than the safe use and application of programs in both a personal and a business setting allowing them to have both the skills and underlying knowledge to access the KS4 course

<p>HALF TERM 1: Safety of information, communication and technology</p> <p>STUDENTS MUST KNOW:</p> <ul style="list-style-type: none"> • How to behave responsibly on the school network. • How their online presence can be tracked. • How to use the school email system effectively. • How code works and how the laws are meant to keep you safe. • What type of risks are online. • What to do as regards cyberbullying and grooming. <p>HOW THIS WILL BE ASSESSED: Assessment will be completed at the end of this topic in the form of a slideshow.</p>	<p>HALF TERM 2: Keyboard skills and Word-processing</p> <p>STUDENTS MUST KNOW:</p> <ul style="list-style-type: none"> • How to use a keyboard effectively including some shortcut keys. • How to do basic touch typing. • How to format a word document and use advanced features such as Drop cap and mail merge <p>HOW THIS WILL BE ASSESSED: Assessment will be completed at the end of this topic in the form of a Word-processed story that can be made personalised using mail merge.</p>	<p>HALF TERM 3: How computers work</p> <p>STUDENTS MUST KNOW:</p> <ul style="list-style-type: none"> • What the basic components are on the motherboard and what they do. • How data flows through the hardware. • What an operating system does and that there are different types. • How to calculate how much space is available on a storage device as several files get added to it. • How computers work in BITs and how that translates into characters using ASCII. • How size, compression and quality apply to sound files. <p>HOW THIS WILL BE ASSESSED: Assessment will be completed at the end of this topic using a choice of application such as Sway or Prezi.</p>
<p>HALF TERM 4: Spreadsheet Modelling</p> <p>STUDENTS MUST KNOW:</p> <ul style="list-style-type: none"> • That some instruction set are repeated. • How to write a basic algorithm. • What the terms mean when referring to a spreadsheet. • How to create a basic formula. • How to create a basic function and autofill. • How to select correct data to generate a meaningful graph. • How to use the spreadsheet model to reach a conclusion <p>HOW THIS WILL BE ASSESSED: Assessment will be completed at the end of this topic by means of a formal assessment on the computer under exam conditions</p>	<p>HALF TERM 5: MSW Logo</p> <p>STUDENTS MUST KNOW:</p> <ul style="list-style-type: none"> • How to program the turtle to make several basic shapes. • How to program the turtle to make several basic shapes. • The basic command words in MSW logo. • How to be able to write and compile a simple program. <p>HOW THIS WILL BE ASSESSED: Assessment will be completed at the end of this topic in the form of a word document explaining and showing the coding required to create a variety of 3D images and shapes.</p>	<p>HALF TERM 5: MSW Logo</p> <p>STUDENTS MUST KNOW:</p> <ul style="list-style-type: none"> • How to program the turtle to make several basic shapes. • How to program the turtle to make several basic shapes. • The basic command words in MSW logo. • How to be able to write and compile a simple program. <p>HOW THIS WILL BE ASSESSED: Assessment will be completed at the end of this topic in the form of a word document explaining and showing the coding required to create a variety of 3D images and shapes.</p>

Embedding this knowledge can be supported at home by cross curricular experiences as well as developing computational thinking skills by use of program such a Scratch and MSW Logo. Codeacademy is also fun and challenging for anyone wanting to develop their programming skills