



## Computing



	<u>Computing</u>				
	Year 7	Year 8	Year 9	Year 10	Year 11
Autumn 1	<p><b>All about me -</b> Slide show produced demonstrating understanding of appropriate graphics, information, and interactivity about themselves.</p>	<p><b>Online Safety -</b> to recap who to talk to if you need to report abuse online. The dangers of meeting with strangers or 'friends' you meet online. Focus around Cyber Bullying and real-life stories.</p>	<p><b>Online Safety -</b> Look privacy on social media. How uploads can be shared and how you can lose control over what you post online including looking at sexting. Recap on being careful who you meet / talk to online.</p>	<p><b>Online Safety -</b> Dangers of AI What is your Digital Footprint Viruses to include Ransomware and Blackmail</p>	<p><b>Online Safety -</b> Online Blackmail Further discussions around staying safe online including recapping on Your Digital Footprint and how social media can affect college / job applications</p>
Autumn 2	<p><b>Online Safety -</b> -Cyberbullying -Security -Online folder structure -log in / out of accounts</p>	<p><b>Interactive Story -</b> Interactive slide show. Being able to use the internet to find relevant information for the story. Being able to set up links / macros to access different slides rather than linear movement. Writing for a specific target audience.</p>	<p><b>ICT in Society -</b> A look at how ICT works in the world around us. Look at advertisements, RFID. Trackers. How consumers are specifically targeted.</p>	<p><b>Introduction to Digital Functional Skills Qualification (Entry Level and Level 1) -</b> Studying Microsoft Software, PowerPoint, Excel, Word, Outlook.</p> <p><b>Additional Qualifications</b> Idea.org.uk introduced – similar to a DofE qualification in ICT</p>	<p><b>Digital Functional Skills -</b> Entry Level and Level 1 Qualifications. Microsoft software to include Word, Excel, PowerPoint, Outlook. Exam preparation.</p> <p><b>Idea.org.uk</b> Additional qualification offered for any student choosing additional ICT</p>



<p><b>Spring 1</b></p>	<p><b>Computer Components -</b>  <i>Activities to demonstrate what is found inside a computer. To look at hardware components, software, best programs to use for best practice. Dangers to computer systems.</i>  <i>History of Computing</i></p>	<p><b>Networks -</b>  <i>To know different network topologies, Star, Bus, Ring. To know differences between LAN and WAN and how the internet works.</i></p>	<p><b>History of Computing -</b>  <i>Brief history of computing, looking specifically how computing language has been created over the centuries. Look at the enigma machine and Caesar cypher. Furthermore, advanced binary, and hexadecimal.</i></p>	<p><b>Digital Functional Skills (Entry Level / Level 1) -</b>  <i>PowerPoint slides, focus on technique, imagery resizing, contrast, borders.</i>  <i>Microsoft Word skills to include image wrap, formatting techniques.</i></p> <p><b>Idea.org.uk</b>  <i>Additional qualification offered for any student choosing additional ICT</i></p> <p><b>ICDL Level 2</b>  <i>New ICT course introduced to further enhance ICT options. Level 2 qualification offered</i></p>	<p><b>Digital Functional Skills</b>  <i>- Entry Level and Level 1 Qualifications.</i>  <i>Microsoft software to include Word, Excel, PowerPoint, Outlook.</i>  <i>Exams to be taken.</i></p> <p><b>Idea.org.uk</b>  <i>Additional qualification offered for any student choosing additional ICT</i></p>
<p><b>Spring 2</b></p>	<p><b>Scratch -</b>  <i>Introduction to coding. To initially look at creating an online game based around Flappy Bird. Then use Scratch online to understand coding structure, flow diagrams, and how a computer interprets instructions.</i></p>	<p><b>Computing Languages</b>  <i>-Introduce Python Programming Language. An insight where computing language comes from - a look at the history of computing. Begin to understand text-based programming language.</i></p>	<p><b>Further development in Computer Coding -</b>  <i>Looking at how text and graphic based language differs. Further advanced Python and Scratch taught recapping on prior knowledge and adding to their understanding. Developing graphical game that moves.</i></p>	<p><b>Digital Functional Skills (Entry Level / Level 1) -</b>  <i>Spreadsheets in Excel. Specific formatting tools explored. Inserting and understanding charts. Functions MAX, MIN, SUM, AVERAGE</i></p> <p><b>Idea.org.uk</b></p>	<p><b>Digital Functional Skills</b>  <i>- Entry Level and Level 1 Qualifications.</i>  <i>Microsoft software to include Word, Excel, PowerPoint, Outlook.</i></p> <p><b>Idea.org.uk</b></p>



				<p><i>Additional qualification offered for any student choosing additional ICT</i></p> <p><b>ICDL Level 2 - Microsoft Excel.</b> <i>Independent study. Modular course with exam at the end of each module.</i></p>	<p><i>Additional qualification offered for any student choosing additional ICT</i></p>
<b>Summer 1</b>	<p><b>Internet Reliability -</b> <i>A look at how internet searching works. Use of Boolean searching techniques, Key words, AND, NOT, OR.</i> <i>To look at fact vs opinion and how we can source facts.</i> <i>A brief look into AI and reliable use</i></p>	<p><b>Spreadsheets -</b> <i>Introduction to Google Sheets. To look at formatting techniques. What are formulae. Using Autofill. Creating Spreadsheets as Databases and sorting data. Creating simple graphs and charts from the data collected.</i></p>	<p><b>Artificial Intelligence -</b> <i>Understanding what AI is and its role in the world</i></p>	<p><b>Digital Functional Skills (Entry Level / Level 1) -</b> <i>Microsoft Outlook. Sending appropriate email. Specific functionality including email signatures created.</i></p> <p><b>ICDL Level 2 -</b> <i>Microsoft Excel as main focus.</i></p> <p><b>Idea.org.uk</b> Additional Qualification</p>	<p><b>Digital Functional Skills -</b> <i>Entry Level and Level 1 Qualifications. Microsoft software to include Word, Excel, PowerPoint, Outlook.</i></p> <p><b>Idea.org.uk</b> <i>Additional qualification offered for any student choosing additional ICT</i></p>
<b>Summer 2</b>	<p><b>Graphics and DTP -</b> <i>-Logos</i> <i>-Altering graphics</i> <i>-Look at Copyright</i> <i>-Creation of own graphic material using specific</i></p>	<p><b>Binary Data Representation -</b> <i>To know how data is represented in its lowest form in 1s and 0s. To understand what binary</i></p>	<p><b>Project -</b> <i>End of year project that will incorporate skills in what has been taught so far. Creating documentation for a</i></p>	<p><b>Digital Functional Skills (Entry Level / Level 1) -</b> <i>Recap of the years learning. An amalgamation of different software used throughout</i></p>	<b>N/A</b>



	<p><i>tools in Google Docs / Slides (Crop, re-colour, shape etc.)</i></p>	<p><i>is and how it works / calculated. To complete Binary math and how that links to what is being typed / seen on the screen. Further develop Scratch understanding. Look at IF statements and develop loops.</i></p>	<p><i>holiday program or music festival. Working out costings, designing graphics, building a game to go with the theme.</i></p>	<p><i>the year as a small project.</i></p> <p><b>ICDL Level 2 -</b> <i>Microsoft Excel, moving on to Microsoft Word as exams are completed.</i></p> <p><b>Idea.org.uk</b> <i>Additional qualification to be gained.</i></p>	
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