

Year 7	Half Term 1		Half Term 2		Half Term 3	
	September – October		November – December		January – February	
	<p><b>Topic: Intro to ICT:</b></p> <ul style="list-style-type: none"> <li>Dangers of online use of social media.</li> <li>Where to seek help</li> <li>Preventative measures</li> <li>How to communicate effectively</li> <li>Correct administration of documents / file naming</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>Word Processing / Presentation Software.</li> <li>Communication to varied audiences.</li> </ul> <p><b>Assessment:</b></p> <ul style="list-style-type: none"> <li>Online Test</li> </ul>		<p><b>Topic: How Computers Work</b></p> <ul style="list-style-type: none"> <li>What is a computer and what it made up of (components)</li> <li>Software and OS</li> <li>Storage and devices</li> <li>Networks / Internet</li> </ul> <p><b>Knowledge:</b></p> <ul style="list-style-type: none"> <li>Components / Software</li> <li>Correct uses of different storage.</li> <li>How we use our network and the internet</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>Analyse the hardware needs of different audiences.</li> <li>Desktop Publishing</li> </ul> <p><b>Assessment:</b></p> <ul style="list-style-type: none"> <li>Online Test / Work Assessment</li> </ul>		<p><b>Topic: History of Gaming</b></p> <ul style="list-style-type: none"> <li>How are games designed to meet user requirements?</li> <li>Target audience and purpose</li> <li>Design and aesthetics</li> <li>How games evolved over time</li> </ul> <p><b>Knowledge:</b></p> <ul style="list-style-type: none"> <li>Understanding of purpose and target audience.</li> <li>Understand design elements and house styles</li> <li>How to adapt software to meet evolving needs of customers.</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>Design skills</li> </ul> <p><b>Assessment:</b></p> <ul style="list-style-type: none"> <li>Online Test / Work Assessment</li> </ul>	
Vocabulary Links	<ul style="list-style-type: none"> <li>Privacy</li> <li>Trolling</li> <li>Sexting</li> <li>Sensitive Data</li> </ul>	<ul style="list-style-type: none"> <li>Digital Footprint</li> <li>Information</li> <li>Cyberbullying</li> <li>Fake News</li> </ul>	<ul style="list-style-type: none"> <li>Hardware</li> <li>CPU</li> <li>RAM</li> <li>Peripherals</li> <li>Storage</li> </ul>	<ul style="list-style-type: none"> <li>Components</li> <li>Network</li> <li>Internet</li> <li>LAN</li> <li>Software</li> </ul>	<ul style="list-style-type: none"> <li>Aesthetics</li> <li>House style</li> <li>Target audience</li> <li>Algorithm</li> <li>Sequencing</li> </ul>	<ul style="list-style-type: none"> <li>Program</li> <li>Concatenation</li> <li>Variables</li> <li>Integer</li> <li>Strings</li> </ul>
National Curriculum	<p><b>NC Objective:</b></p> <p><b>9</b> – Safe use of technology</p>		<p><b>NC Objective:</b></p> <p><b>5</b> – Understanding the hardware and software making up a computer system.</p>		<p><b>NC Objectives:</b></p> <p><b>8</b> – Create, re-use, revise and re-purpose digital artefacts for a given audience.</p> <p><b>1</b> – Design, use and evaluate computational abstractions that model a real-world use/problem.</p> <p><b>7</b> – Undertake creative projects that involve selecting, using and combining multiple applications.</p>	

Year 7	Half Term 4		Half Term 5		Half Term 6
	February – March		April – May		June – July
	<p><b>Topic: Scratch</b></p> <ul style="list-style-type: none"> <li>• What is meant by the term Algorithm</li> <li>• Real World Examples of Algorithms</li> <li>• Creating a flow diagram</li> <li>• Programming from an Algorithm -</li> </ul> <p><b>Knowledge:</b></p> <ul style="list-style-type: none"> <li>• Understanding of sequencing, iteration and selection.</li> <li>• How sequencing can affect the outcome of a program</li> <li>• How flowcharts are made up of particular objects and which to use.</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>• Logical Thinking – Sequencing</li> <li>• Scratch</li> </ul> <p><b>Assessment:</b></p> <ul style="list-style-type: none"> <li>• Online Test / Work Assessment</li> </ul>		<p><b>Topic: Multimedia</b></p> <ul style="list-style-type: none"> <li>• Pupils given a holiday scenario and asked to write about their top destination - Write a brief/audience; Produce a visualisation diagram; Source Assets; Content; Evaluation and reflect on quality of product/information</li> </ul> <p><b>Knowledge:</b></p> <ul style="list-style-type: none"> <li>• Popular holiday destinations and how to promote them.</li> <li>• How to meet the needs of a given audience</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>• Use of Dreamweaver to create the website / PowerPoint to create the presentation.</li> <li>• Illustrator to create the components.</li> </ul> <p><b>Assessment:</b></p> <ul style="list-style-type: none"> <li>• Online Test</li> </ul>		<p><b>Topic: Portfolio</b></p> <p><b>Knowledge:</b></p> <p>Consolidation of learning throughout the year, including:</p> <ul style="list-style-type: none"> <li>• Intro to ICT and e-safety</li> <li>• How computers work</li> <li>• History of gaming</li> <li>• Scratch</li> <li>• Multimedia</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>• Understanding of ICT basics and e-safety.</li> <li>• Understanding of basic programming skills and creative use of ICT</li> </ul> <p><b>Assessment:</b></p> <ul style="list-style-type: none"> <li>• Online test</li> </ul>
Vocabulary Links	<ul style="list-style-type: none"> <li>• Algorithm</li> <li>• Sequencing</li> <li>• Selection</li> <li>• Program</li> <li>• Iteration / Loop</li> </ul>	<ul style="list-style-type: none"> <li>• Concatenation</li> <li>• Variables</li> <li>• Integer</li> <li>• Strings</li> <li>• Casting</li> </ul>	<ul style="list-style-type: none"> <li>• Target Audience</li> <li>• Visualisation</li> <li>• Annotation</li> <li>• Copyright</li> <li>• Assets</li> </ul>	<ul style="list-style-type: none"> <li>• Dreamweaver</li> <li>• HTML</li> </ul>	<ul style="list-style-type: none"> <li>• Phishing</li> <li>• CPU</li> <li>• Target audience</li> <li>• Sprite</li> <li>• Aesthetics</li> </ul>
National Curriculum	<p><b>NC Objective:</b></p> <p><b>2</b> – Understand several key algorithms that reflect Computational Thinking.</p> <p><b>3</b> – Use two or more programming languages to solve computational problems</p>		<p><b>NC Objective:</b></p> <p><b>7</b> – Undertake creative projects that involve selecting, using and combining multiple applications.</p> <p><b>8</b> – Create, re-use, revise and re-purpose digital artefacts for a given audience.</p> <p><b>1</b> – Design, use and evaluate computational abstractions that model a real-world use/problem.</p>		<p><b>NC Objectives:</b></p> <p><b>8</b> – Create, re-use, revise and re-purpose digital artefacts for a given audience.</p> <p><b>1</b> – Design, use and evaluate computational abstractions that model a real-world use/problem.</p> <p><b>9</b> – Undertake creative projects that involve selecting, using and combining multiple applications.</p>

Year 8	Half Term 1 September – October		Half Term 2 November – December		Half Term 3 January – February	
	<p><b>Topic: Scratch</b></p> <ul style="list-style-type: none"> <li>• What is meant by the term Algorithm</li> <li>• Real World Examples of Algorithms</li> <li>• Creating a flow diagram</li> <li>• Programming from an Algorithm - Scratch</li> </ul> <p><b>Knowledge:</b></p> <ul style="list-style-type: none"> <li>• Understanding of sequencing, iteration and selection.</li> <li>• How sequencing can affect the outcome of a program</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>• Logical Thinking – Sequencing</li> <li>• Scratch</li> </ul> <p><b>Assessment:</b></p> <ul style="list-style-type: none"> <li>• Online Test / Work Assessment</li> </ul>		<p><b>Topic: Python</b></p> <ul style="list-style-type: none"> <li>• Python Programming using a text-based language – Strings; Variables; Loops – Iteration; If/Else – Selection</li> </ul> <p>Applying this knowledge to Microbit programming.</p> <p><b>Knowledge:</b></p> <ul style="list-style-type: none"> <li>• Apply knowledge from Algorithms to create successful programs.</li> <li>• Knowledge of key terminology – Strings / variables / iteration / selection – All will have been encountered before.</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>• Python</li> <li>• Using the Microbit website to download code to the devices</li> </ul> <p><b>Assessment:</b></p> <ul style="list-style-type: none"> <li>• Online test</li> </ul>		<p><b>Topic: Spreadsheets</b></p> <ul style="list-style-type: none"> <li>• Modelling of spreadsheets – use of real-world examples</li> <li>• Explain about password protection and protecting files in organisations.</li> <li>• Encryption</li> </ul> <p><b>Knowledge:</b></p> <ul style="list-style-type: none"> <li>• Creating formulas</li> <li>• How to create graphs</li> <li>• Formatting the style to suit a particular brand image.</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>• Using Microsoft Excel – particularly formulas and manipulation of data.</li> </ul> <p><b>Assessment:</b></p> <ul style="list-style-type: none"> <li>• Online test</li> </ul>	
Vocabulary Links	<ul style="list-style-type: none"> <li>• Algorithm</li> <li>• Sequencing</li> <li>• Selection</li> <li>• Iteration / Loop</li> </ul>	<ul style="list-style-type: none"> <li>• Program</li> <li>• Concatenation</li> <li>• Variables</li> <li>• Integer</li> <li>• Strings</li> <li>• Casting</li> </ul>	<ul style="list-style-type: none"> <li>• Python</li> <li>• IDE</li> <li>• Algorithm</li> <li>• Sequencing</li> <li>• Selection</li> <li>• Iteration / Loop</li> </ul>	<ul style="list-style-type: none"> <li>• Program</li> <li>• Concatenation</li> <li>• Microbit</li> <li>• Variables</li> <li>• Integer</li> <li>• Strings</li> </ul>	<ul style="list-style-type: none"> <li>• Model</li> <li>• Formula</li> <li>• Cell</li> <li>• Cell Reference</li> </ul>	<ul style="list-style-type: none"> <li>• Relative</li> <li>• Absolute</li> <li>• Filter</li> <li>• Encryption</li> </ul>
National Curriculum	<p><b>NC Objective:</b></p> <p><b>4</b> – Understand several key algorithms that reflect Computational Thinking.</p> <p><b>5</b> – Use two or more programming languages to solve computational problems</p>		<p><b>NC Objectives:</b></p> <p><b>8</b> – Create, re-use, revise and re-purpose digital artefacts for a given audience.</p> <p><b>3</b> – Use two or more programming languages to solve computational problems.</p> <p><b>1</b> – Design, use and evaluate computational abstractions that model a real-world use/problem.</p>		<p><b>NC Objective:</b></p> <p><b>1</b> – Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems.</p> <p><b>NC Objective:</b></p> <p><b>8</b> – Create, re-use, revise and re-purpose digital artefacts for a given audience.</p>	

Year 8	Half Term 4 February - March		Half Term 5 April – May		Half Term 6 June - July
		<p><b><u>Topic:</u> HTML</b></p> <ul style="list-style-type: none"> <li>• Binary Recap</li> <li>• Hexadecimal</li> <li>• More advanced logic gates <b><u>Knowledge:</u></b></li> <li>• Reminder of how computers store information.</li> <li>• Converting Denary to Base-16 Hexadecimal</li> <li>• How image and sound data is stored as binary</li> <li>• How compression affects this <b><u>Skills:</u></b></li> <li>• Numeracy</li> <li>• Learning a base-16 method of recording data and applying it to conversion tasks</li> </ul> <p><b><u>Assessment:</u></b></p> <ul style="list-style-type: none"> <li>• Online Test</li> </ul>		<p><b><u>Topic:</u> Algorithms</b></p> <ul style="list-style-type: none"> <li>• Recap on Algorithms</li> <li>• Interpreting flow diagram</li> <li>• Convert a flow diagram into Pseudocode</li> <li>• Complete Pseudocode activities <ul style="list-style-type: none"> <li>• Programming techniques</li> </ul> </li> </ul> <p><b><u>Knowledge:</u></b></p> <ul style="list-style-type: none"> <li>• Recap over knowledge from Year 7 but advancing skills to more difficult Pseudocode.</li> </ul> <p><b><u>Skills:</u></b></p> <ul style="list-style-type: none"> <li>• Conversion of a problem into Pseudocode</li> <li>• Python programming</li> </ul> <p><b><u>Assessment:</u></b></p> <ul style="list-style-type: none"> <li>• Online Test</li> </ul>	
Vocabulary Links	<ul style="list-style-type: none"> <li>• Target Audience</li> <li>• Visualisation</li> <li>• Annotation</li> <li>• Copyright</li> <li>• Assets</li> </ul>	<ul style="list-style-type: none"> <li>• Dreamweaver</li> <li>• HTML</li> </ul>	<ul style="list-style-type: none"> <li>• Algorithm</li> <li>• Sequencing</li> <li>• Selection Iteration / Loop</li> <li>• Program</li> </ul>	<ul style="list-style-type: none"> <li>• Terminator</li> <li>• Variables</li> <li>• Integer</li> <li>• String</li> <li>• Pseudocode</li> </ul>	<ul style="list-style-type: none"> <li>• Iteration</li> <li>• Selection</li> <li>• Cell Reference</li> <li>• Tags</li> <li>• Pseudocode</li> </ul>
National Curriculum	<p><b><u>NC Objective:</u></b></p> <p><b>10</b> – Undertake creative projects that involve selecting, using and combining multiple applications.</p> <p><b>11</b> – Create, re-use, revise and re-purpose digital artefacts for a given audience.</p> <p><b>1</b> – Design, use and evaluate computational abstractions that model a real-world use/problem.</p>		<p><b><u>NC Objective:</u></b></p> <p><b>2</b> – Understand several key algorithms that reflect Computational Thinking.</p> <p><b>7</b> – Create, re-use, revise and re-purpose digital artefacts for a given audience.</p> <p><b>3</b> – Use two or more programming languages to solve computational problems.</p> <p><b>1</b> – Design, use and evaluate computational abstractions that model a real-world use/problem.</p>		<p><b><u>NC Objectives:</u></b></p> <p><b>8</b> – Create, re-use, revise and re-purpose digital artefacts for a given audience.</p> <p><b>1</b> – Design, use and evaluate computational abstractions that model a real-world use/problem.</p> <p><b>12</b> – Undertake creative projects that involve selecting, using and combining multiple applications.</p>

Year 9	Half Term 1		Half Term 2		Half Term 3
	September – October		October – December		January – February
	<p><b>Topic: Business Project</b></p> <p><b>Knowledge:</b></p> <ul style="list-style-type: none"> <li>To understand what a budget is</li> <li>Be able to calculate a personal budget</li> <li>To be able to distinguish between a necessity and a want</li> <li>To understand that budgets need to be flexible</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>To calculate income minus expenditure</li> <li>To identify items that we need, and those that we want- luxuries</li> <li>To be able to read and understand a bank statement</li> </ul> <p><b>Assessment</b></p> <ul style="list-style-type: none"> <li>Online Test</li> </ul>		<p><b>Topic: Computer Science</b></p> <p><b>Knowledge:</b></p> <ul style="list-style-type: none"> <li>What is a computer and what it made up of (components)</li> <li>Software and OS</li> <li>Network topologies, protocols, and layers</li> <li>Components / Software</li> <li>Correct uses of different storage.</li> <li>How we use our network and the internet</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>Analyse the hardware needs of different audiences.</li> <li>Desktop Publishing</li> </ul> <p><b>Assessment:</b></p> <ul style="list-style-type: none"> <li>Online Test / Work Assessment</li> </ul>		<p><b>Topic: Economics</b></p> <p><b>Knowledge:</b></p> <ul style="list-style-type: none"> <li>Understand about wages and taxes.</li> <li>Understand about mortgages.</li> <li>Understand about budgeting.</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>Create a spreadsheet that calculates a wage, including tax and other deductions.</li> <li>Work out a mortgage based on a given income.</li> <li>Find a house for sale within budget and within given user requirements.</li> </ul> <p><b>Assessment:</b></p> <ul style="list-style-type: none"> <li>Online Test</li> </ul>
Vocabulary Links	<ul style="list-style-type: none"> <li>Budget</li> <li>Surplus</li> <li>Deficit</li> <li>Calculate</li> </ul>		<ul style="list-style-type: none"> <li>Hardware</li> <li>CPU</li> <li>RAM</li> <li>DNS</li> <li>Topology</li> <li>Protocols</li> </ul>	<ul style="list-style-type: none"> <li>Components</li> <li>Network</li> <li>Internet</li> <li>LAN</li> <li>Software</li> <li>DNS</li> </ul>	<ul style="list-style-type: none"> <li>Budget</li> <li>Surplus</li> <li>Deficit</li> <li>Calculate</li> </ul>
National Curriculum	<p><b>Objective:</b></p> <p>Business Studies is an option subject – exposure to content is very important.</p>		<p><b>NC Objective:</b></p> <p>5 – Understanding the hardware and software making up a computer system.</p>		<p><b>Objective:</b></p> <p>Economics is an option subject – exposure to content is very important.</p>

Year 9	Half Term 4	Half Term 5		Half Term 6
	February – March	April – May		June – July
	<p><b>Topic: Digital IT</b></p> <p><b>Knowledge:</b></p> <ul style="list-style-type: none"> <li>Understanding a client brief</li> <li>What is a user interface?</li> <li>Compare and contrast different models</li> <li>Suitability for target audience</li> <li>Accessibility and navigation</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>Identify needs of a client</li> <li>Understand how to meet the requirements of customers</li> <li>Use of advanced PowerPoint skills</li> <li></li> </ul> <p><b>Assessment:</b></p> <ul style="list-style-type: none"> <li>Online Test</li> </ul>	<p><b>Topic: Ethics and Multimedia</b></p> <ul style="list-style-type: none"> <li>What do we / businesses store on computers?</li> <li>Security</li> <li>Threats to networks</li> <li>What laws help with this?</li> <li>How would your online activity affect careers – digital footprint?</li> <li>Analysing and creating graphics.</li> </ul> <p><b>Knowledge:</b></p> <ul style="list-style-type: none"> <li>What is data and how is it used?</li> <li>What would happen if data was lost / stolen?</li> <li>What do recruiters look for when trying to hire someone?</li> <li>How to create graphics using Illustrator.</li> <li>Creating a product for a specific purpose and target audience.</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>Use of Illustrator and Dreamweaver</li> </ul> <p><b>Assessment:</b></p> <ul style="list-style-type: none"> <li>Online Test</li> </ul>		<p><b>Topic: Portfolio</b></p> <p><b>Knowledge:</b></p> <p>Consolidation of learning throughout the year, including:</p> <ul style="list-style-type: none"> <li>Business</li> <li>Computer Science</li> <li>Economics</li> <li>DIT</li> <li>Ethics</li> <li>Multimedia</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>Developing a business model using Excel</li> <li>Create a model of a CPU and a network</li> <li>Create a document to represent personal finances</li> <li>Create a poster to highlight the impacts of computing</li> <li>Creative use of ICT in web development</li> </ul> <p><b>Assessment:</b></p> <ul style="list-style-type: none"> <li>Online test</li> </ul>
Vocabulary Links	<ul style="list-style-type: none"> <li>Target audience</li> <li>House style</li> <li>Interactive</li> <li>User interface</li> </ul>	<ul style="list-style-type: none"> <li>Manipulation</li> <li>Graphics</li> <li>Ethics</li> <li>Impact</li> <li>Censorship</li> </ul>	<ul style="list-style-type: none"> <li>Resolution</li> <li>Compression</li> <li>Vector/Bitmaps</li> <li>Privacy</li> <li>Monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Budget</li> <li>Topology</li> <li>Deficit</li> <li>User interface</li> <li>Raster</li> </ul>
National Curriculum	<p><b>NC Objective:</b></p> <p><b>7</b> – Undertake creative projects that involve selecting and combining multiple applications.</p> <p><b>8</b> – Create, re-use, revise and re-purpose digital artefacts for a given audience.</p>	<p><b>NC Objective:</b></p> <p><b>9</b> – Undertake creative projects that involve selecting, using and combining multiple applications.</p> <p><b>10</b> – Create, re-use, revise and re-purpose digital artefacts for a given audience.</p>		<p><b>NC Objectives:</b></p> <p><b>8</b> – Create, re-use, revise and re-purpose digital artefacts for a given audience.</p> <p><b>9</b> – Undertake creative projects that involve selecting, using and combining multiple applications.</p>