

ICT – Year 5					
	Topic and Assessment / Outcomes	Knowledge Progression / Resources	Vocabulary	Skills Progression Links within / across curriculum	Links with BLP and SMSC
Autumn 1	Coding	<ul style="list-style-type: none"> <li>To understand what simulating a physical system means.</li> <li>To describe how to use variables to make a countdown timer and score-pad for a game.</li> </ul> <p><u>Resources</u></p> <ul style="list-style-type: none"> <li><a href="#">Purple Mash</a> <ul style="list-style-type: none"> <li><a href="#">2Dos</a></li> <li><a href="#">Tools</a></li> <li><a href="#">2Chart</a></li> <li><a href="#">Free code gorilla</a></li> </ul> </li> <li><a href="#">Knowledge Organiser</a></li> </ul>	Action Alert Algorithm Bug Code Design Command Control Debug/Debugging Design Mode Event Get Input If If/Else Input Output Object Repeat Sequence Selection Simulation Timer Variable	<ul style="list-style-type: none"> <li>To represent a program design and algorithm.</li> <li>To create a program that simulates a physical system using decomposition.</li> <li>To explore string and text variable types so that the most appropriate can be used in programs.</li> <li>To use the Launch command in 2Code Gorilla</li> <li>To program a playable game with timers and scorepad.</li> </ul>	<p><b>BLP</b></p> <ul style="list-style-type: none"> <li>Perseverance</li> <li>Planning</li> <li>Imagining</li> <li>Reasoning</li> <li>Noticing</li> <li>Questioning</li> </ul> <p><b>SMSC</b></p> <ul style="list-style-type: none"> <li>Using imagination and creativity</li> </ul>
		<ul style="list-style-type: none"> <li>To know who to tell if I see anything online that makes me upset or scared.</li> <li>To understand why passwords are important.</li> <li>To know why it is important to reference sources in my work.</li> </ul> <p><u>Resources</u></p> <ul style="list-style-type: none"> <li><a href="#">Purple Mash</a> <ul style="list-style-type: none"> <li><a href="#">Display Boards</a></li> <li><a href="#">2Paint A Picture</a></li> <li><a href="#">2Connect</a></li> <li><a href="#">2Publish Plus</a></li> </ul> </li> <li><a href="#">Knowledge Organiser</a></li> </ul>	Online Safety Smart Rules Password Reputable Encryption Identity Theft Shared Image Plagiarism Citations Reference Bibliography	<ul style="list-style-type: none"> <li>To gain a greater understanding of the impact that sharing digital content can have.</li> <li>To review sources of support when using technology and children's responsibility to one another in their online behaviour.</li> <li>To know how to maintain secure passwords.</li> <li>To understand the advantages, disadvantages, permissions and purposes of altering an image digitally and the reasons for this.</li> <li>To be aware of appropriate and inappropriate text, photographs and videos and the impact of sharing these online.</li> <li>To learn about how to reference sources in their work</li> <li>To search the Internet with a consideration for the reliability of the results of sources to check validity and understand the impact of incorrect information.</li> </ul>	<p><b>BLP</b></p> <ul style="list-style-type: none"> <li>Noticing</li> <li>Imitation</li> <li>Revising</li> </ul> <p><b>SMSC</b></p> <ul style="list-style-type: none"> <li>Recognise right and wrong</li> <li>Understand consequences</li> <li>Understand, accept, respect and celebrate diversity</li> </ul> <ul style="list-style-type: none"> <li>Teacher</li> <li>Police officer</li> <li>Cyber/ Criminologist</li> </ul>

<b>S p r i n g 1</b>	<b>Spreadsheets</b>	<ul style="list-style-type: none"> <li>To know how to add a formula to a cell so that the cell shows the product of two other cells.</li> <li>To know what to use to have a cell that automatically calculates the number of days since a certain date.</li> <li>To explain what a spreadsheet model of a real-life situation is and what it can be used for.</li> </ul> <p><u>Resources</u></p> <ul style="list-style-type: none"> <li><a href="#">Purple Mash</a> <ul style="list-style-type: none"> <li><a href="#">2Calculate</a></li> </ul> </li> <li><a href="#">Knowledge Organiser</a></li> </ul>	Average Advance Mode Copy and Paste Columns Cells Charts Equals Tool Formula Formula Wizard Move Cell Tool Random Tool Rows Spin Tool Spreadsheet Timer	<ul style="list-style-type: none"> <li>Using a formula wizard to add a formula to a cell to automatically make a calculation in that cell.</li> <li>To copy and paste within a spreadsheet.</li> <li>Use spreadsheet tools to test a hypothesis.</li> <li>To add a formula to a cell to automatically make a calculation in that cell.</li> <li>Using a spreadsheet to model a real-life situation and answer questions.</li> </ul>	<b>BLP</b> <ul style="list-style-type: none"> <li>Perseverance</li> <li>Questioning</li> <li>Noticing making links</li> </ul> <b>SMSC</b> <ul style="list-style-type: none"> <li>Reflection</li> <li>Understand consequences</li> <li>Participate, volunteer and cooperate</li> </ul>	<ul style="list-style-type: none"> <li>Global skill applicable to most jobs</li> <li>Admin Team Member/Admin Team Manager</li> <li>Accountant</li> <li>Software Developer</li> <li>Web Developer</li> </ul>
<b>S p r i n g 2</b>	<b>Databases</b>	<ul style="list-style-type: none"> <li>To know what a database is</li> <li>To understand what collaborative features of software are important.</li> <li>To know a variety ways to sort information in a database.</li> </ul> <p><u>Resources</u></p> <ul style="list-style-type: none"> <li><a href="#">Purple Mash</a> <ul style="list-style-type: none"> <li><a href="#">2Investigate</a></li> </ul> </li> <li><a href="#">Knowledge Organiser</a></li> </ul>	Avatar Binary Tree/Branching Database Charts Collaborative Data Database Find Record Sort, Group and Arrange Statistics and Reports Table	<ul style="list-style-type: none"> <li>To learn how to search for information in a database</li> <li>To contribute to a class database</li> <li>To create a database around a chosen topic</li> </ul>	<b>BLP</b> <ul style="list-style-type: none"> <li>Perseverance</li> <li>Planning</li> <li>Noticing</li> <li>Collaboration</li> </ul> <b>SMSC</b> <ul style="list-style-type: none"> <li>Using imagination and creativity.</li> <li>Asking questions to aid understanding.</li> <li>Offer reasoned views.</li> </ul>	<ul style="list-style-type: none"> <li>Global skill applicable in all jobs</li> </ul>
<b>S u m m e r 1</b>	<b>Game Creator</b>	<ul style="list-style-type: none"> <li>To understand what makes a good computer game.</li> <li>To know why it is important to continually evaluate your game.</li> </ul> <p><u>Resources</u></p> <ul style="list-style-type: none"> <li><a href="#">Purple Mash</a> <ul style="list-style-type: none"> <li><a href="#">2DIY3D</a></li> </ul> </li> <li><a href="#">Knowledge Organiser</a></li> </ul>	Animation Computer Game Customise Evaluation Image Instructions Interactive Screenshot Texture Perspective Playability	<ul style="list-style-type: none"> <li>To set the scene.</li> <li>To create the game environment.</li> <li>To create the game quest.</li> <li>To finish and share the game.</li> <li>To evaluate their and peers' games.</li> </ul>	<b>BLP</b> <ul style="list-style-type: none"> <li>Perseverance</li> <li>Planning</li> <li>Noticing</li> <li>Imagining</li> </ul> <b>SMSC</b> <ul style="list-style-type: none"> <li>Using imagination and creativity.</li> </ul>	<ul style="list-style-type: none"> <li>Game developer</li> <li>Game designer</li> </ul>

<b>S u m m e r 2</b>	<b>3D Modelling</b>	<ul style="list-style-type: none"> <li>To understand there are different views of an object available within CAD software.</li> <li>To understand that objects designed in CAD can be turned into 3D objects</li> <li>To know how CAD software is used in industry.</li> </ul> <p><u>Resources</u></p> <ul style="list-style-type: none"> <li><a href="#">Purple Mash</a> <ul style="list-style-type: none"> <li>o <a href="#">2Design And Make</a></li> </ul> </li> <li><a href="#">Knowledge Organiser</a></li> </ul>	CAD (Computer Aided Design) Modelling 3D Viewpoint Polygon 2D Net 3D Printing Points Template	<ul style="list-style-type: none"> <li>To be introduced to CAD software.</li> <li>To explore the effect of moving points when designing.</li> <li>To understand designing for a purpose.</li> <li>To understand printing and making.</li> </ul>	BLP <ul style="list-style-type: none"> <li>Perseverance</li> <li>Planning</li> <li>Noticing</li> </ul> SMSC <ul style="list-style-type: none"> <li>Asking questions to aid understanding</li> <li>Offer reasoned views</li> </ul>	<ul style="list-style-type: none"> <li>Architect</li> <li>Surgeons</li> <li>Land developer</li> <li>Council members</li> <li>Housing developers</li> </ul>
<b>S u m m e r 2</b>	<b>Concept Maps</b>	<ul style="list-style-type: none"> <li>To understand what a concept map is.</li> <li>To understand how information is arranged on a concept map.</li> <li>To understand how a concept map helps to share ideas.</li> </ul> <p><u>Resources</u></p> <ul style="list-style-type: none"> <li><a href="#">Purple Mash</a> <ul style="list-style-type: none"> <li>o <a href="#">2Connect</a></li> </ul> </li> <li><a href="#">Knowledge Organiser</a></li> </ul>	Audience Collaboratively Concept Concept Map Connection Idea Node Thought Visual	<ul style="list-style-type: none"> <li>To understand the need for visual representation when generating and discussing complex ideas.</li> <li>To understand and use the correct vocabulary when creating a concept map.</li> <li>To create a concept map.</li> <li>To understand how a concept map can be used to retell stories and present information.</li> <li>To create a collaborative concept map and present this to an audience.</li> </ul>	BLP <ul style="list-style-type: none"> <li>Perseverance</li> <li>Planning</li> <li>Noticing</li> <li>Making links</li> <li>Collaboration</li> </ul> SMSC <ul style="list-style-type: none"> <li>Using imagination and creativity</li> </ul>	<ul style="list-style-type: none"> <li>Global skill applicable to most jobs</li> </ul>