







Term	Main Computing Theme	Sub Questions / Key Knowledge	Subject Specific Vocabulary	Software / Resources	Assessment will be based on a formative approach of children being able to answer the key questions using the knowledge acquired over the half term through a quiz-based approach.
Autumn 1 	DL – Computer Systems and Networks – Connecting Computers	<p>What are the functions of digital devices? What is the difference between input and output devices? How can digital devices change the way we work? How can computer networks share information? What are the physical components of a network?</p> <p>I know that digital devices have a set function. I know the difference between input and output devices. I know digital devices can change the way that we work. I know a computer network can be connected to share information. I know about the physical components of a network.</p>	Secure Passwords Private Public Social media report	Google Chrome	
Autumn 2 	IT – Powerpoint	<p>How can images be edited and inserted into a programme? What are the functions of the left and right clicks on the mouse? What are the punctuation keys? Which template would be suitable for (a given purpose)? How can slides be duplicated and arranged? How can we format slides by theme and colour? How can we modify, edit and delete text boxes?</p> <p>I know images can be edited and inserted into a programme.: colour adjustments, transparency and shape. I know the function of left and right click on the mouse. I know about the punctuation keys. ----- I know which template to use for a given purpose. I know slides can be arranged and duplicated I know slides can be formatted by theme and colour.</p>	Crop Multimedia Powerpoint Slide format	Powerpoint	

<p>Spring 1</p> 	<p>CS – Scratch</p>	<p>I know text boxes can be modified deleted and edited.</p> <p>How can algorithms be created in scratch? What is editing a sprite? What do loop blocks do? What do duration blocks do? What do look blocks do? How do I retrieve previous work? What is the purpose of event blocks? What are the inputs and outputs in Scratch?</p> <p>I know algorithms can be created in scratch. I know what editing a sprite is. I know what loop blocks do. I know what duration blocks do. I know what look blocks do. I know what retrieving previous work looks like. I know about a range of event blocks. I know about a range of inputs and outputs in Scratch.</p>	<p>Algorithms Editing Loop blocks Duration sprite</p>	<p>Scratch - Scratch - Imagine, Program, Share (mit.edu)</p>	
<p>Spring 2</p> 	<p>CS – Crumble – Light Painting Project</p>	<p>What does each part of the crumble hardware do? What is the role of each part of hardware? How can looks be used to create a specific output? What does the ‘wait until’ (duration) block do? What does the ‘do until’ (loop) block do?</p> <p>I know what each part of the hardware does. I know the role of each part of the hardware. I know that loops can be used to create a specific output. I know what ‘wait until’ (duration) and ‘do until’ (loop) blocks do.</p>	<p>Hardware Loops duration</p>	<p>Rewdfen electronics – Light painting project</p> <p>Light Painting Project Redfern Electronics</p> <p>Crumble</p>	

<p>Summer 1</p> 	<p>CS – Kodu</p>	<p>What do loop blocks do in Kodu? How can Kodu behaviour be predicted using code? How can sprites appearance and behaviour be edited?</p> <p>I know what loop blocks do in Kodu games. I know Kodu behaviour can be predicted using code. I know sprites appearance and behaviour can be edited.</p>	<p>Loop blocks If blocks Then blocks When blocks Edited Behaviour</p>	<p>Kodu Game Lab Software</p>	
<p>Summer 2</p> 	<p>IT - 2DIY game</p>	<p>What is a sprite? What is an AI? How can an AI be coded to alter position and direction? What is a goal and how can this be achieved in my game? How can the appearance of my sprite be edited?</p> <p>I know what a sprite is. I know what AI is. I know AI can be coded to alter position and direction. I know what a goal is and how it can be achieved in my game. I know the appearance of sprites can be edited</p>	<p>AI Alter Position Direction appearance</p>	<p>2DIY 3D Purple mash program Purple Mash by 2Simple</p>	