

Computing LTP – 2022

	Y1	Y2	Y3	Y4	Y5	Y6
Autumn 1	<p>DL - Computing Systems and Networks – Technology around us</p> <p>I know technology can be identified. I know a computer can be identified by its main parts. I know a mouse can be used for clicking. I know a keyboard can be used to type on a computer. I know there are rules for using technology responsibly.</p>	<p>DL – Computer Systems and Networks - IT around us</p> <p>I know information technology is used in and beyond school. I know information technology can help us. I know information technology must be used safely. I know choices are made when using information technology.</p>	<p>DL – Computer Systems and Networks – Connecting Computers</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>	<p>DL – Computer Systems and Networks – The Internet</p> <p>I know networks physically connect to other networks. I know networked devices make up the internet. I know websites can be shared via the World Wide Web (WWW). I know content can be added and accessed on the World Wide Web (WWW). I know the consequences of unreliable content.</p>	<p>DL – Computer Systems and Networks – Systems and Searching</p> <p>I know computers can be connected together to form systems. I know the role of computer systems in our lives. I know how to use a search engine. I know search engines select results. I know search results are ranked. I know why the order of results is important, and to whom.</p>	<p>DL – Computer Systems and Networks – Communication and Collaboration</p> <p>I know the importance of internet addresses. I know how data is transferred across the internet. I know sharing information online can help people to work together. I know different ways of working together online. I know we communicate using technology. I know about different methods of online communication.</p>
Autumn 2	<p>IT - 2Create a Story</p> <p>I know pages can be created. I know what a background is. I know shape tools can be used to create digital art. I know what animation is and that it can be applied to digital art.</p>	<p>IT – Word</p> <p>I know a mouse can be left clicked and right clicked. I know new folders can be created. I know capital letters can be formed. I know my work can be spell checked. I know which buttons are my cursor keys. ----- I know a range of media can be inserted using</p>	<p>IT – Powerpoint</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.</p>	<p>IT – Powerpoint</p> <p>I know media can be copied and pasted from one document to another. I know efficient methods of saving work. ----- I know to insert a range of multimedia including video files and sounds. I know slide transitions can be added. I know animations can be provided for a purpose.</p>	<p>IT – Excel</p> <p>I know basic formatting can be used across Microsoft office (text size, font, colour, size, underline). I know how to use keyboard shortcuts to save, copy and paste. ----- I know what columns, cells and rows are. I know data needs to be inputted with accuracy.</p>	<p>IT - Fake News/ Blogging – Green screen</p> <p>I know keyboard shortcuts work efficiently. I know the snipping tools purpose. -----</p>

		clipart, word art and shape.	I know slides can be arranged and duplicated I know slides can be formatted by theme and colour. I know text boxes can be modified deleted and edited.		I know basic calculations can be solved using excel. I can create a simple formula. I can apply the autosum feature for desired effect.	
Spring 1	CS – Beebots I know what directions are. I know the difference between left and right. I can predict what the beebot will do. I know the end of a maze can be reached I know what a turn is. I know to check code by running my program. I know that 'go' is an event.	CS – Beebots I know what rotation is. I know the difference between anti-clockwise and clockwise. I know what an estimate is. I know how to get to the end of a complex maze using turns. I know what the Beebot will do before running the code. I know problems when observing code and can fix them.	CS – Scratch 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	CS – Scratch I know what sensing blocks do. I know what operators do. I know what variables are and how they can be used in a game. I know co-ordinates can provide precise motion.	CS - Minecraft Education I know what sequencing blocks are. I know what event and event handlers do. I know how co-ordinates can be used to determine position. I know what absolute world position is. I know what "if" conditionals can be used for. I know what "if else" conditionals are used for. I know a range of loops including repeat, for, while and forever loops.	IT – Excel I know keyboard shortcuts work efficiently. I know the snipping tools purpose. I know the format of cells. I know simple graphs can be created from inputted data I know data can be filtered and sorted.
Spring 2	CS - 2code – chimp (fish, bubbles, airport, snail, vehicles, turtle) I know that clicking is an input. I know that events can happen in code when I click. I know what is wrong with a line of code. I know that arrow keys can be used for direction.	CS - Scratch Jnr I know what an algorithm is. I know why code won't work in scratch jnr. I know what a sprite is. I know code behaviour can be predicted in scratch. I know what motion is. I know what repetition is. I know what inputs and outputs are in scratch jnr.	CS – Crumble – Light Painting Project 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.	CS – Crumble – Parking Sensor Project I know what an ultrasonic sensor can do. I can code variables on hardware. I know variables can be used on hardware. I know I can duplicate code to be more efficient.	CS - Lego we do I know what artificial intelligence is. I know the advantages of using AI for a set goal. I know that sensors can detect motion, colour and inclination.	CS – Microbits I know what a radio signal is. I know hardware can communicate through radio signals. I know that hardware uses variables (Called ID's) to communicate. I can use 'selection' blocks to complete a project using hardware.

		I know that code starts with an event block.				I know the practical uses for a range of sensors for hardware.
Summer 1	<p>IT – Word</p> <p>I know files can be saved.</p> <p>I know files can be opened.</p> <p>I know the purpose of backspace, space bar and enter button.</p> <p>I know what double clicking on a mouse is.</p> <p>-----</p> <p>I know font size and colour can be changed.</p>	<p>CS – Lightbot</p> <p>I know what each coding block represents.</p> <p>I know what debugging is.</p> <p>I know that debugging can fix code.</p> <p>I know a range of strategies to solve a coding problem.</p> <p>I know to run code to evaluate how it works.</p>	<p>CS – Kodu</p> <p>I know what loop blocks do in Kodu games.</p> <p>I know Kodu behaviour can be predicted using code.</p> <p>I know sprites appearance and behaviour can be edited.</p>	<p>CS - Minecraft Education</p> <p>I know what credibility is.</p> <p>I know what pattern recognition is and can apply it.</p> <p>I know repetitive loops can be applied and their effect.</p> <p>I know what a nested loop is.</p> <p>I know what collaboration is and can use it to complete a project.</p> <p>I know what debugging is and can apply it in a project.</p>	<p>CS – Microbits</p> <p>I know that variables can be random numbers.</p> <p>I know code is used in a range of modern devices. (Activity tracker)</p> <p>I can write an algorithm to achieve a set goal (Create a step counter)</p> <p>I know debugging programs involves random number variables.</p>	<p>CS - Vex VR</p> <p>I know what a simulation is.</p> <p>I know what virtual reality is.</p> <p>I know what a simulation can evaluate.</p> <p>I know that nested loops create more efficient complex programs.</p> <p>I know what selection (If then) code does and how it can be utilised.</p>
Summer 2	<p>IT – Data Handling (2graph, 2question)</p> <p>I know data can be organised in a table.</p> <p>I know data can be inputted in a programme.</p> <p>I know data can be presented in graphs.</p> <p>I know what a flowchart is.</p>	<p>IT - 2 Animate</p> <p>I know digital art tools have a range of functions.</p> <p>I know what a frame is.</p> <p>I know frames can change.</p> <p>I know frames can be sped up and slowed down.</p>	<p>IT - 2DIY game</p> <p>I know what a sprite is.</p> <p>I know what AI is.</p> <p>I know AI can be coded to alter position and direction.</p> <p>I know what a goal is and how it can be achieved in my game.</p> <p>I know the appearance of sprites can be edited</p>	<p>IT - Stop Frame Animation</p> <p>I know small movements create animation.</p> <p>I know which software is appropriate for animation.</p> <p>I know what transitions are and their purpose.</p> <p>I know a correct speed of transition to create a stop frame animation.</p>	<p>IT - Sensory Room</p> <p>I know what the purpose of a sensory room is.</p> <p>I know Bluetooth connections connect devices.</p> <p>I know sound, smells and images can be manipulated using technology.</p> <p>I know sensors rooms can be used to provide experiences.</p>	<p>CS - Vex Robotics</p> <p>I know what each part of the robot does.</p> <p>I know that each controller input can be coded separately.</p> <p>I know that code can be uploaded to the robot efficiently.</p> <p>I know of a range of strategies to complete a set goal.</p>

	<p>I know selection can be used in a flowchart</p> <p>I know questions and answers can be represented on a flowchart.</p> <p>I can follow a flowchart.</p>					
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Autumn 1 - Teachcomputing.org

Crumble – Redfernelectronics.co.uk/projects

DL – Digital Literacy

IT – Information Technology

CS – Computer Science