Computing Curriculum Overview 2021/22

	Autumn 1	Spring 1	Summer1
Year 1	**Introduction to using the tools (BGFL)** • *Complete simple tasks on a computer by following instructions.*	**Creating and debugging programs Part 2 (BGFL)** • *Make choices to control simple models of simulations.* **OR** **Text and Images (iLearn2)** • *Use technology purposefully*	**Create an eBook (BGFL)** *OR* **Comic Creation (iLearn2)** • *Show an awareness of information in different formats*
	Autumn 2	**Spring 2**	**Summer 2**
	Creating and debugging programs Part 1 (BGFL) • *Solve a problem using ICT.* • *Give simple instructions to every day devices to make things happen.* **OR** **Introduce Programming (iLearn2)** Skills as above plus: • *Make choices to control simple models of simulations.*	**Gathering data and creating charts (BGFL)** • *Put data into a program (pictogram). Sort objects and pictures in lists or simple tables.* • *Explain that images can give them information. Say what a pictogram is showing them.*	**Collect photographs and paint pictures (BGFL)** • *Make decisions about whether or not statements or images found online are likely to be true.*
	Autumn 1	**Spring 1**	**Summer1**
Year 2	**Creating and debugging programs Part 1 (BGFL)** • *Recognise what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions.* *OR* **Develop Programming (iLearn2)** • *Write and test simple programs.* • *Use logical reasoning to predict the behaviour of simple programs.*	**Creating and debugging programs Part 2 (BGFL)** • *Write and test simple programs.* • *Use logical reasoning to predict the behaviour of simple programs.* *OR* **Programming with Scratch Jr (iLearn2)** • *Recognise what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions.*	**Interpret charts and graphs (BGFL)** **OR** **Introduce Data Handling (iLearn2)** • *Explain how a branching or tree diagram works.* • *Place objects and pictures in a list or simple table. Make a simple Y/N tree diagram to sort information.*

	Autumn 2	Spring 2	Summer 2
	Create an eBook (BGFL) **OR** **eBook Creation (iLearn2)** • *Explain why digital folders are used.* • *Organise work into digital folders*	**Using digital imagery (BGFL)** **OR** **Digital Art (iLearn2)** • *Organise, store, manipulate and retrieve data in a range of digital formats.*	**Presenting research (BGFL)** • *Communicate safely, respecting and considering other people's feelings online.*

	Autumn 1	Spring 1	Summer1
Year 3	**Write a program Part 1 (BGFL)** • *Use logical reasoning to explain how a simple algorithm works.* • *Use sequence, selection and repetition in programs.* **OR** **Programming in Scratch (iLearn2)** *Skills as above plus:* • *Analyse and tackle problems by decomposing into smaller parts*	**Produce digital artwork (BGFL) OR** **Digital Art (iLearn2)** • *Identify and select appropriate information using straightforward lines of enquiry. Use different approaches to search and retrieve digital information, including the browser address bar and short cuts.* • *Become discerning in evaluation digital content.*	**Write a program Part 2 (BGFL)** • *Analyse and tackle problems by decomposing into smaller parts* **OR** **Game Creation (iLearn 2)** • *Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals.*

	Autumn 2	Spring 2	Summer 2
	Research and present information (BGFL) • *Demonstrate a knowledge of computer systems and hardware by describing input and output devices used in everyday life.* • *Use software or search engines effectively.*	**Gather opinions (BGFL)** • *Design a questionnaire to collect information.*	**Interrogate a Database (BGFL)** *Identify how to select information to put into a data table. Recognise which information is suitable for their topic.*

	Autumn 1	Spring 1	Summer1
Year 4	**Create a fact file with audio (BGFL)** • *Use and combine a variety of software and internet services on a range of digital devices to accomplish given goals, including collecting, analysing,*	**Explain and present (BGFL)** **OR** **Internet Research (iLearn2)** • *Use and combine a variety of software and internet services on a range of*	**Programming animation (BGFL)** **OR** **Programming in Scratch (iLearn2)** • *Detect and correct errors in algorithms and programs (debug).*

evaluating and presenting data and information.	*digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.*	• *Test programs using models and simulations. Design and write programs that accomplish specific goals, working with variables for input and output.* • *Use logical reasoning to detect problems, make changes and find out what happens as a result.* • *Create programs to control physical systems. Discuss opportunities for online communication and collaboration.*
Autumn 2	**Spring 2**	**Summer 2**
Make an advert (BGFL) **OR** **Video editing (iLearn2)** • *Demonstrate knowledge and understanding of computer hardware including input, output and storage devices.*	**Make an audio book (BGFL)** **OR** **Ebook creation (iLearn2)** • *Evaluate the quality and success of their solutions.* • *Check plausibility and usefulness of information they find.*	**Data Handling (BGFL)** **OR** **Data Handling (iLearn2)** • *Describe how to sort and organise information to use in a database.* • *Create a branching database from information that they have collected and sorted.*

	Autumn 1	**Spring 1**	**Summer1**
Year 5	**Online presentation (BGFL) combine with Understand Computer Networks and the World Wide Web (iLearn2)** • *Recognise the need for accuracy when searching for and selecting information. Use different sources to double check information found.* • *Demonstrate knowledge and understanding of computer systems and hardware by identifying and defining the functions of the processor, memory, backing storage and peripherals in a typical desktop computer.*	**Making games (BGFL)** **OR** **Programming in Scratch (iLearn2)** • *With support, begin to produce algorithms by using logical and appropriate structures to organise data, and create precise and accurate sequences of instructions.* • *Use flow charts and other diagrams to follow how a process or model works.* • *Use logical reasoning to solve problems and model situations and processes. Predict what will happen when variables and rules within a model are changed.*	**Create QR code (BGFL)** **OR** **App Design (iLearn 2)** • *Prepare and present information in a range of forms, using ICT safely and responsibly.*
	Autumn 2	**Spring 2**	**Summer 2**

	Analyse and interpret data (BGFL) • *Describe how to check for and spot inaccurate data. Know which formulas to use to change a spreadsheet model.* • *Create data collection forms and enter data from these accurately. Make graphs from the calculations on their own spreadsheet.*	**Making Games continued (BGFL)** **OR** **Text-based programming and Physical devices (iLearn2)** • *Skills as above*	**Making animation to include audio (BGFL)** • *Select, use and combine a variety of software, including internet services on a range of digital devices, explaining how email and online discussion areas are used for communication and collaboration.*

	Autumn 1	**Spring 1**	**Summer1**
Year 6	**Research and present (BGFL)** **OR** **Computers: Past, Present, Future (iLearn2)** • *Design and create/use a range of programs to accomplish given goals* • *Take account of accuracy and potential bias when searching for and selecting information* • *Evaluate and improve presentations in the light of discussion, marking and audience response.*	**Digital presentation of work (BGFL)** • *Design and create/use a range of programs to accomplish given goals* • *Evaluate and improve presentations in the light of discussion, marking and audience response.* • *Explain that changing the numerical data affects a calculation.* • *Create data collection forms and enter data from these accurately. Make graphs from the calculations on their spreadsheet. Sort and filter information.*	**Presenting range of information (BGFL)** **OR** **Web Design (iLearn2)** • *Evaluate and improve presentations in the light of discussion, marking and audience response.* • *Design and create digital content to accomplish goals.*
	Autumn 2	**Spring 2**	**Summer 2**
	Create game in Scratch (BGFL) **OR** **Programming in Scratch (iLearn2)** • *Produce algorithms independently using logical appropriate structures to organise and record data.* • *Create flow charts and other diagrams to explain how a process or model works.* • *Independently problem solve and model situations and processes, by understanding and explaining the*	**Digital presentation of work (BGFL) continued** • *Design and create/use a range of programs to accomplish given goals* • *Evaluate and improve presentations in the light of discussion, marking and audience response.* • *Explain that changing the numerical data affects a calculation.* • *Create data collection forms and enter data from these accurately. Make graphs from the calculations on their spreadsheet. Sort and filter information.*	**Understanding the internet (BGFL)** • *Demonstrate knowledge and understanding of how networks work by describing the type of service offered.* • *Find, report and flag buttons in commonly used sites and name sources of help.* **Binary Code (iLearn2)** • *Understand how instructions are stored and executed within a computer system* • *Understand how data of various types (including text, sounds and pictures)*

	impact of changing variables and rules with in a model.		*can be represented and manipulated digitally*