

Computer Science Key Stage 3

	Emerging	Developing	Secure	Mastered
IT	Can identify what the internet is and list ways it can be used.	Can identify how data travels between computers across the internet.	Can explain the differences between the internet and the world wide web.	Can explain how the 'Internet of Things' collects and shares information about me with or without the user's knowledge.
DL	Can choose suitable search terms to find content on the internet or can create a digital artefact with support.	Can plan and create a digital artefact to include features identified that are relevant to context.	Can use a combination of digital features to create a digital artefact suitable for chosen audience, including using common functions in a spreadsheet program.	Can create a multiple page digital artefact applying consistent styling for chosen audience, including creating a graph from a set of data.
CT	Can compare how humans and computers understand and carry out instructions.	Can create a simple algorithm using visual programming language.	Can create an algorithm that includes selection, iteration and variables using a visual programming language.	Can decompose a problem into sub problems and implement a solution.
IT	Can explain the differences between the internet and the world wide web.	Can explain how the 'Internet of Things' collects and shares information about me with or without the user's knowledge.	Identify that all computing systems regardless of form have a similar architecture. List common hardware devices.	Demonstrate how numbers and text are represented in a computer system. Be competent in conversion of binary to decimal and vice versa.
DL	Can use a combination of digital features to create a digital artefact for chosen audience, including using common functions in a spreadsheet program.	Can create a multiple page digital artefact applying consistent styling for chosen audience, including creating a graph from a set of data.	Can design, plan and create a multiple page digital artefact applying consistent styling for a chosen audience.	Can evaluate a multiple page digital artefact applying consistent styling for a chosen audience and suggest improvements.
CT	Can create an algorithm that includes selection, iteration and variables using a visual programming language.	Can decompose a problem into sub problems and implement a solution.	Can create an algorithm that includes selection, iteration and variables including using a textual programming language.	Independently interpret errors and debug an algorithm in a textual programming language.
IT	Identify that all computing systems regardless of form have a similar architecture. List common hardware devices.	Demonstrate how numbers and text are represented in a computer system. Be competent in conversion of binary to decimal and vice versa.	Explain how the manipulation of digital images and sounds amounts to arithmetic operations.	Calculate the representation size for digital images, sounds and text.
DL	Can design, plan and create a multiple page digital artefact applying consistent styling for a chosen audience.	Can evaluate multiple page digital artefact applying consistent styling for a chosen audience.	Using industry standard software to create digital artefacts such as 3D animations, images and sound. Use software to visualise and identify trends in data.	Independently select and use a software application to carry out an unfamiliar task.
CT	Can create an algorithm that includes selection, iteration and variables including using a textual programming language.	Independently interpret errors and debug an algorithm in a textual programming language.	Identify the similarities between strings and lists, performing common operations on both.	Independently combines key programming language features to write solutions to meaningful problems.