Year 3	Year 4	Year 5	Year 6
Computing systems and networks			
Connecting computers • To identify input and output devices • To explain that a computer system accepts an input and processes it to produce an output • To explain how a computer network can be used to share information • To explain the roles of a switch, server, and wireless access point in a network • To identify network devices around me • To explain how networks can be connected to other networks	**The internet** • To discuss why a network needs protecting • To explain that not everything on the World Wide Web is true • To explain why some information I find online may not be honest, accurate, or legal	**Systems and searching** • To describe input and output of a search engine • To demonstrate that different search terms produce different results • To evaluate the results of a search term	**Communication and collaboration** • To outline methods of communicating and collaborating using the internet • To choose methods of internet communication and collaboration for given purposes • To evaluate different methods of online communication and collaboration • To decide what you should and should not share online
Data and information			
Branching databases • To create questions with yes/no answers	**Data logging** • To use a digital device to collect data automatically • To choose how often to automatically collect data samples • To use a set of logged data to find information.	**Flat file databases** • To choose different ways to view data • To ask questions that need more than one attribute to answer • To choose which attribute and value to search by to answer a given question (operands)	**Spreadsheets** • To calculate data using a formula for each operation • To use functions to create new data • To use existing cells within a formula

	To use a computer program to sort data by one attribute. To export information in different formats	To choose which attribute to sort data by to answer a given question To choose multiple criteria to search data to answer a given question (AND and OR) To select an appropriate graph to visually compare data To choose suitable ways to present information to other people	To choose suitable ways to present spreadsheet data

Creative media

Stop Frame animation	Audio editing	Video production	Web page creation
• To play an animation using a storyboard • To set up the work area with an awareness of what will be captured • To capture an image • To use the onion skinning tool to review subject position • To move a subject between captures • To review a captured sequence of frames as an animation • To remove frames to improve an animation • To review a completed project	• To record sound using a computer • To play recorded audio • To import audio into a project • To delete a section of audio • To change the volume of tracks in a project	• To use different camera angles • To use pan, tilt and zoom • To identify features of a video recording device or application • To combine filming techniques for a given purpose • To determine what scenes will convey your idea • To decide what changes I will make when editing • To choose to reshoot a scene or improve later through editing • To use split, trim and crop to edit a video	• To review an existing website (navigation bars, header) • To create a new blank web page • To change the appearance of text • To add text to a web page • To set the style of text on a web page • To embed media in a web page • To add web pages to a website • To preview a web page (different screen sizes) • To insert hyperlinks between pages • To insert hyperlinks to another site **3D modelling** • To position 3D shapes relative to one another

Desktop publishing			
Desktop publishing ● To show that page orientation can be changed ● To add text to a placeholder ● To organise text and image placeholders in a page layout ● To add and remove images to and from placeholders ● To edit text in a placeholder ● To move, resize and rotate images ● To choose fonts and apply effects to text ● To review a document			● To use digital tools to modify 3D objects ● To combine objects to create a 3D digital artefact ● To use digital tools to accurately size 3D objects ● To construct a 3D model which reflects a real-world object

Programming			
Sequence in music ● To build a sequence of commands ● To combine commands in a program ● To order commands in a program ● To create a sequence of commands to produce a given outcome	**Repetition in shapes/ Repetition in games** ● To list an everyday task as a set of instructions including repetition ● To use an indefinite loop to produce a given outcome ● To use a count-controlled loop to produce a given outcome ● To plan a program that includes appropriate loops to produce a given outcome	**Selection in physical computing / Selection in quizzes** ● To create a condition-controlled loop ● To use a condition in an 'if...then...' statement to start an action ● To use selection to switch the program flow in one of two ways ● To use a condition in an 'if...then...else...' statement to produce given outcomes	**Variables in games** ● To identify a variable in an existing program ● To experiment with the value of an existing variable ● To choose a name that identifies the role of a variable to make it easier for humans to understand it ● To decide where in a program to set a variable ● To update a variable with a user input

	• To recognise tools than enable more than one process to be run at the same time (concurrency) • To create two or more sequences that run at the same time		• To use an event in a program to update a variable • To use a variable in a conditional statement to control the flow of a program • To use the same variable in more than one location in a program