

Computing Progression of disciplinary skills – Information Technology

Year Group	Using software	Using email and internet searches	Using data	Wider use of technology
Rec	Using a simple online paint tool to create digital art.	N/A	Representing data through sorting and categorising objects in unplugged scenarios. Representing data through physical pictograms. Exploring branch databases through physical games.	N/A
Year 1	Using a basic range of tools within graphic editing software. Taking and editing photographs. Developing control of the mouse through dragging, clicking and resizing of images to create different effects. Developing understanding of different software tools	Recognising devices that are connected to the internet. Searching and downloading images from the internet safely. Understanding that we are connected to others when using the internet.	Understanding that technology can be used to represent data in different ways: pictograms, tables, pie charts, bar charts, block graphs etc. Using representations to answer questions about data. Using software to explore and create pictograms and branching databases.	Recognising common uses of information technology, including beyond school. Understanding some of the ways we can use the internet.
Year 2	Developing word processing skills, including altering text, copying and pasting and using keyboard shortcuts. Using word processing software to type and reformat text. Using software (and unplugged means) to create story animations. Creating and labelling images.	Searching for appropriate images to use in a document. Understanding what online information is.	Collecting and inputting data into a spreadsheet. Interpreting data from a spreadsheet.	Learning how computers are used in the wider world.
Year 3	Taking photographs and recording video to tell a story. Using software to edit and enhance their video adding music, sounds and text on screen with transitions.	Learning to log in and out of an email account. Writing an email including a subject, 'to' and 'from.' Sending an email with an attachment. Replying to an email.	Understanding the vocabulary to do with databases: field, record, data. Learning about the pros and cons of digital versus paper databases. Sorting and filtering databases to easily retrieve information. Creating and interpreting charts and graphs to understand data.	Understanding the purpose of emails. Recognising how social media platforms are used to interact.

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Year 4	Building a web page and creating content for it. Designing and creating a webpage for a given purpose. Use online software for documents, presentations, forms and spreadsheets. Using software to work collaboratively with others.	Understanding why some results come before others when searching. Using keywords to effectively search for information on the internet. Understanding that information found by searching the internet is not all grounded in fact. Searching the internet for data.	Understanding that data is used to forecast weather. Recording data in a spreadsheet independently. Sorting data in a spreadsheet to compare using the 'sort by...' option. Designing a device which gathers and records sensor data.	Understanding that software can be used collaboratively online to work as a team.
Year 5	Using logical thinking to explore software more independently, making predictions based on their previous experience. Using software programme Sonic Pi/Scratch to create music. Using the video editing software to animate. Identify ways to improve and edit programs, videos, images etc. Independently learning how to use 3D design software package TinkerCAD.	Developing searching skills to help find relevant information on the internet. Learning how to use search engines effectively to find information, focussing on keyword searches and evaluating search returns.	Understanding how data is collected in remote or dangerous places. Understanding how data might be used to tell us about a location.	Learn about different forms of communication that have developed with the use of technology.
Year 6	Using logical thinking to explore software independently, iterating ideas and testing continuously. Using search and word processing skills to create a presentation. Creating and editing sound recordings for a specific purpose. Creating and editing videos, adding multiple elements: music, voiceover, sound, text and transitions. Using design software TinkerCAD to design a product. Creating a website with embedded links and multiple pages.	Understanding how search engines work.	Understanding how barcodes, QR codes and RFID work. Gathering and analysing data in real time. Creating formulas and sorting data within spreadsheets.	Learning about the Internet of Things and how it has led to 'big data'. Learning how 'big data' can be used to solve a problem or improve efficiency.