Strand	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Computer Science							
Programming, including Controlling Hardware	*I can understand a large task as smaller steps (links to algorithms and decomposition)*	*I can understand and create* **algorithms** *(steps or rules as instructions, e.g. how to make a sandwich)* *I understand that* **algorithms** *must be precise and unambiguous*	*I can* **predict** *the behaviour of simple programs* *I can create and run a* **program** *(an algorithm or multiple algorithms that can be understood by a computer)* *I can* **debug** *(find and fix a problem) within a simple program*	*I can create a* **sequence** *of commands to produce a given outcome* *I can recognise that the order of commands will produce a different outcome* *I can control or simulate* **programmable hardware** *(e.g. a Sphero robot)*	*I can create a program that uses* **loops** *to achieve a particular outcome* *I can recognise that some programs can be run at the same time* *(concurrency)* *I can* **decompose** *(break into smaller chunks) a programming problem*	*I can use* **selection** *in my programs. (Also known as* **conditionals** *or* **If / Then** *statements). (e.g. if a character moves onto a yellow square, then gain two points)* *I can create an* **'if... then... else...'** *statement that will result in different outcomes* *I can explain that instructions in a* **program** *will produce specific outcomes* *I can create and modify a* **count** *or* **event-controlled loop**	*I can identify examples of information that is* **variable** *I can use* **variables** *of my own creation within my programs* *I can* **program** *and* **debug** *multiple functions on programmable hardware (e.g. with a Microbit)*

Strand	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Information Technology							
Knowledge & Understanding	I can talk about technology, using pictures and memory recall I can explore apps on a touchscreen, large interactive screen or laptop device.	I can identify examples of **technology** in the classroom I can place **items** into groups (e.g. these shapes are all red) I can decide on **labels** for groups (e.g. these shapes all have four sides)	I can identify the major parts of **digital devices** (e.g. keyboard, screen, power, batteries, touchscreen) I can **identify** information technology in the school, home, and beyond I can **enter data** into a computer system I can use a computer to **present** data I can use a computer to answer questions on data	I can identify **networked devices** around me (e.g. networked printer, wireless laptop) I can identify **inputs** and **outputs** of common computing devices (e.g inputs: keys on a keyboard, temperature sensor, tilting a device; outputs: screen display, printer) I can use technology to organise and manipulate **digital content** I can create questions with yes / no answers to categorise objects I can retrieve information from different levels of a branching database	I can recognise that the **world wide web** is part of the **internet** I understand that the global interconnection of networks is the **internet** I can use a digital device to **collect data** automatically I can choose how often to collect **data samples**	I can recognise the different roles of **computer systems** in our lives I understand that **connections** between computers allow us to work together I understand that **emails** and other digital communications can be sent and received from various types of digital device I can choose multiple criteria to **search data** to answer a given question (**AND and OR**) I can choose which **attribute** to sort data by to answer a given question I can choose an appropriate graph to visually compare **data**	I can identify questions that can be answered using **spreadsheet data** I can recognise that data can be calculated using different **operations** I can apply a **formula** to **calculate** the data I need to answer questions I can identify that there are a variety of ways of communicating over the **internet** I can explain that a **search engine** follows rules to rank relevant pages I can explain how **search engines** make money by selling **advertising space**

Strand	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Multimedia and Sound	I can experience and talk about pictures, video and sound that are viewed through digital devices	I can use an **app** or **website** to make graphical marks or pictures	I can use **technology** to capture *(e.g. with an iPad)* and manipulate *(position, re-size, rotate)* photos I can create and adjust audio using digital technology	I can design and create an **animation** *(e.g. stop-frame animation on an iPad)* I can recognise that different **font styles** and **effects** are used for particular purposes	I can plan for a podcast or music production I can **record** and **edit** sound using digital technology as part of a podcast or music production I can edit images for purpose I can manipulate and adjust images for a particular purpose	I can edit **video**, bringing together different media elements *(e.g. stills, video, captions and sound)* to produce an effective final product I can create a **vector drawing** that is comprised of lines and shapes of different colours I can **resize, duplicate, rotate** and **align** objects in vector drawings I can use **grouping** and **layers** in my vector drawing	I can recognise the common features of a web page I can devise my own web design which contains navigation paths (menus, hyperlinks etc.) I can recognise the difference when working with **3D objects** in comparison to 2D shapes I can produce a **3D model** and decide how it can be improved *(e.g. using Tinkercad)*

Strand	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Digital Literacy							
Operational Core Skills	I can use hand-eye coordination to operate devices such as touch-screens	I can use **apps** or **websites** to aid my learning I can **save and retrieve** work that I have produced	I can **type** and **edit** basic text I can use **two-finger scrolling** on a touchpad	I know how to **search** for items on the internet I can **type** confidently and independently I can type **basic punctuation**	I can **type** to achieve specific goals, including accurate punctuation I can check and correct my spellings digitally	I can edit and improve **on-screen writing**, including digital thesaurus use I can combine a variety of **software** *(programs that run on computers)* to	I can **re-order** on-screen sentences for clarity, purpose or effect I can **type at speed** with accurate spelling and use of

		*(includes **auto-save**)* *I can move a **cursor** with the trackpad and **click** on an icon*	*I can use the **shift key** to create capital letters*	*correctly within on-screen writing (spaces, commas, full stops, question marks)* *I can perform a **two-finger click or right-click** to access additional options*	*I can successfully use multiple **apps** or **web browser tabs** at the same time*	*accomplish given goals*	*punctuation conventions*
Self-image and Identity	*I know that being on-screen is different to real life.*	*If something happens that makes me feel sad, worried, uncomfortable or frightened I can give examples of when and how to speak to an adult I can trust.*	*I can describe ways in which people might make themselves look different online.*	*I can describe ways in which media can shape ideas about gender.*	*I can explain how my online identity can be different to the identity I present in 'real life'.*	*I can explain how identity online can be copied, modified or altered.*	*I can explain how I can represent myself in different ways online.*
Online relationships	*I recognise that people can talk to each other using technologies.*	*I can recognise some ways in which the **internet** can be used to communicate.*	*I can explain some risks of communicating **online** with others I don't know well.*	*I can explain how my and other people's feelings can be hurt by what is said or written online.*	*I can explain what it means to 'know someone' online and why this might be different from knowing someone in real life.*	*I can explain how impulsive and rash communications online may cause problems (e.g. flaming, content produced in live streaming).*	*I can demonstrate how I would support others (including those who are having difficulties) online.*
Online reputation	*I can talk about different types of information on the internet, e.g. pictures / text / video.*	*I can describe what information I should not put **online** without asking a trusted adult first.*	*I can explain how information put online about me can last for a long time.*	*I know who I should ask if I am not sure if I should put something online.*	*I can describe how others can find out information about me by looking online.*	*I can describe ways that information about people online can be used by others to make judgments about an individual.*	*I can describe some simple ways that help build a positive online reputation.*

Online bullying	I know that people can be kind, or might be unkind, online.	I can describe how to behave online in ways that do not upset others		*I can describe rules about how to behave online and how I follow them.*	I can explain why I need to think carefully about how content I post might affect others, their feelings and how it may affect how others feel about them (their reputation).	I can explain how I would report online bullying on the apps and platforms that I use.	I can identify a range of ways to report concerns both in school and at home about online bullying.
Managing online information	*I can use, talk about or read different on-screen programs, pictures, stories or information.*	*I can identify devices I could use to access information on the internet.*	*I can demonstrate how to navigate a simple webpage to get to information I need (e.g. home, forward, back buttons; links, tabs and sections).*	*I can evaluate digital content and can explain how I make choices from search results.*	*I can **analyse** information and differentiate between 'opinions', 'beliefs' and 'facts'.*	*I can explain why lots of people sharing the same opinions or beliefs online does not make those opinions or beliefs true.*	*I can demonstrate strategies to enable me to analyse and evaluate the validity of 'facts' and I can explain why using these strategies are important.*
Health, well-being and lifestyle	*I can talk about the difference between activities that are online or offline.*	*I can explain rules to keep us safe when we are using technology both in and beyond the home.*	*I can create **rules** for using technology **safely***	*I can identify situations when I might need to limit the amount of time I use technology.*	*I can describe ways technology can affect healthy sleep and can describe some of the issues.*	*I can describe common systems that regulate age-related content (e.g. PEGI, BBFC, parental warnings) and describe their purpose.*	*I can assess and action different strategies to limit the impact of technology on my health (e.g. nightshift mode, regular breaks, correct posture, sleep, diet and exercise).*
Privacy and security	*I can talk about trusting people (e.g. parents, teachers).*	*I can identify some simple examples of my personal information (e.g. name, address,*	*I can explain why I should always ask a trusted adult before I share any information about myself online.*	*I can describe simple strategies for creating and keeping passwords private.*	*I can explain how internet use can be monitored.*	*I can explain how many free apps or services may read and share my private information (e.g. friends, contacts,*	*I can compare and evaluate different methods of online communication*

		birthday, age, location).				likes, images, videos, voice, messages, geolocation) with others.	
Copyright and ownership	I know that work I create belongs to me.	I can name my work so that others know it belongs to me.	I can recognise that content on the internet may belong to other people.	I can explain why copying someone else's work from the internet without permission can cause problems.	When searching on the internet for content to use, I can explain why I need to consider who owns it and whether I have the right to reuse it.	I can demonstrate the use of search tools to find and access online content which can be reused by others.	I can recognise the implications of linking to (and using) content owned by other people