Computing Progression Map

	Year 3	Year 4	Year 5	Year 6
Vocabulary	**Keyboards** laptop, screen, mouse, keyboard, power cable, document, edit, save, open **E-Safety** password, case, character, number, symbol, publicly, privately, personal, information, private, Social Media, Public Profile, Private Profile, Responsibility, Online form, Digital Footprint/Digital Tattoo, Avatar, trust, safe, trusted adult **Coding** time, sequence, function box, after, execute, algorithm, control, seconds, physical system, simulation, debug, design **Databases** database, interface, record, field **Word Processing** word processing, keyboard, screen, cursor, document, case, align, advanced select, shortcuts, spellcheck	**Databases** database, interface, record, field **E-Safety** diceware, generate, random, social Media, URL, 'fine print', trustworthy, share, profile, public platform, direct message, private message, healthy, screen time, genuine, honest, fraud, unreliable, suspicious, phishing, spear phishing, scam, authentic, verifiable, deceptive, true, helpful, inspiring, necessary, kind **Coding** variable, condition, score, start, click, place, time, variable, time, negative, assign, value, event, click, execute, if, statement, var_s, value, if, true **Animation** Flipbook, thaumatrope, zoetrope, onion skinning, app **Keyboards** Word processing, keyboard, shortcuts, format, wrap text	**PowerPoint** PowerPoint, design, layout, animation, transition **Coding** numbers, debug, object, action, speed, acceleration, deceleration, angle, heading, if, assign, decompose, iteratively, co-ordinates, condition, negative numbers, Y axis, X axis, iPad, true, value, friction, direction, rotate, variable, random, intervals, time, simulate, random number, generate, angle, degrees, value, score, random number, mouse move, event, match, bounce **E-Safety** Two-step verification, Two-step authentication, biometric, security token, hacker, scammer, digital footprint, digital tattoo, personal boundaries **Databases** Database, record, field, excel, spreadsheet, cell, column, row, formula/formulae	**Information Technology** Internet, world wide web, search engine, plagiarism. **E-Safety** bullying, bystander, up-stander, harassment, block, positive, negative, public, private/ privacy, digital footprint/tattoo, personal information, settings, personal boundaries, security, hacker, scammer, trustworthy, online support, Online reporting, barriers, self-regulation, strategies, deliberate, firewall, anti-virus, ad blockers, operating system, digital personality, social media stream, algorithm trending, generic results, personalisation, personalised adverts, SMS, video conferencing, audio conferencing, social networks, chat rooms, forums, communication, PM, IM, positive emotions, negative emotions, interpretation **Coding** variable, prompt, pixels, imperial, metric, miles, kilometres, repeated addition, multiplication, angle, degrees, analogue, digital, formula, condition, convert, property, object, calculation, dragend, parameter, ev.d, ev.a, heading, friction, drag, swipe, equal, random, property, objects, location, events, X axis, Y axis, coordinates **Databases** spreadsheet, database, record, field, cell, column, row, formulae/formula, bar chart, average **Animation** Animation, app, iMovie, edit, sound effect, narrate

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	Year 3	Year 4	Year 5	Year 6
Computer Science	• Make things happen in a sequence, creating simple animations and simulations. • Code with 'if statements', which select different pieces of code to execute depending on what happens to other objects. • Keep testing my program and can recognise when I need to debug it. • Describe the algorithm I will need for a simple task. • Save and retrieve work on the internet, the school network or my own device. • Talk about the parts of a computer. • Tell you ways to communicate with others online. • Describe the World Wide Web as the part of the internet that contains websites. • Use search tools to find and use an appropriate website.	• Know computers use variables to count things and keep track of what is going on and I create simple games which use a score variable. • Know how to use repetition and loops to do things over and over again. • Tell whether a resource I am using is on the internet, the school network or my own device. • Identify key words to use when searching safely on the World Wide Web. • Think about the reliability of information I read on the World Wide Web. • Tell how to check who owns photos, text and clipart. • Create a hyperlink to a source on the World Wide Web.	• Know computers use numbers to represent things such as how fast things are moving, and where they are. • Know computers can generate random numbers and I know how these can be used in simulations. • Describe different parts of the internet. • Use a search engine to find appropriate information and check its reliability. • Recognise and evaluate different types of information I find on the World Wide Web. • Describe the different parts of a webpage.	• Use variables in more complex ways and manipulate inputs to create useful outputs. • Know more about how computers use property values and parameters to store information about objects. • Recognise the internet services I need to use for different purposes. • Describe how information is transported on the internet. • Talk about the way search results are selected and ranked. • Check the reliability of a website. • Demonstrate knowledge of copyright and acknowledge the sources of information that I find online.

Computing Progression Map

	Year 3	Year 4	Year 5	Year 6
Digital Literacy including e - safety	• Talk about what makes a secure password and why they are important. • Understand when to share personal information and when not to • Be aware that some people lie about who they are online • Use the safety features of websites as well as reporting concerns to an adult. • Recognise websites and games appropriate for my age. • Make good choices about how long I spend online. • Recognise the need to ask an adult before downloading files and games from the internet. • Recognise ways to communicate with others online.	• Choose a secure password when I am using a website. • Talk about the ways I can protect myself and my friends from harm online. • Use the safety features of websites as well as reporting concerns to an adult. • Know that anything I post online can be seen by others. • Choose websites and games that are appropriate for my age. • Help my friends make good choices about the time they spend online. • Talk about why I need to ask a trusted adult before downloading files and games from the internet. • Comment positively and respectfully online	• Recognise the need to protect my password and other personal information. • Explain why I need to protect myself and my friends and the best ways to do this, including reporting concerns to an adult. • Know that anything I post online can be seen, used and may affect others. • Talk about the dangers of spending too long online or playing a game. • Explain the importance of communicating kindly and respectfully. • Discuss the importance of choosing an age- appropriate website or game. • Explain why I need to protect my computer or device from harm. • Use different online communication tools	• Protect my password and other personal information. • Explain the consequences of sharing too much information about myself online. • Support my friends to protect themselves and make good choices online, including reporting concerns to an adult. • Explain the consequences of spending too much time online or on a game. • Explain the consequences to myself and others of not communicating kindly and respectfully. • Protect my computer or device from harm on the internet. • Know that algorithms are used to track online activities with a view to targeting advertising and information • Use different tools to collaborate and communicate online

Computing Progression Map

	Year 3	Year 4	Year 5	Year 6
Information Technology	• Talk about the different ways data can be organised. • Search a ready-made database to answer questions. • Collect data to help me answer a question. • Add information to a database. • Use a data logger to monitor changes and can talk about the information collected. (Cross curricular with science) • Use appropriate keyboard commands to amend text on my device, including making use of a spellchecker. • Evaluate my work and improve its effectiveness.	• Organise data in different ways. • Collect data and identify where it could be inaccurate. • Plan, create and search a database to answer questions. • Choose the best way to present data to my friends. • Use a data logger to record and share my readings. (Cross curricular with science) • Use photographs to create short pieces of animation • Change the appearance of text to increase its effectiveness. • Create, modify and present documents for a particular purpose. • Use a keyboard confidently and make use of a spellchecker to write and review my work.	• Use a spreadsheet and database to collect and record data. • Choose an appropriate tool to help me collect data. • Present data in an appropriate way. • Search a database using different operators to refine my search. • Talk about mistakes in data and suggest how it could be checked • Use text, photo, sound to refine my work. • Use the skills I have already developed to create content using unfamiliar technology. • Select, use and combine the appropriate technology tools to create effects that will have an impact on others.	• Plan the process needed to investigate the world around me. • Select the most effective tool to collect data for my investigation. • Check the data I collect for accuracy and plausibility. • Interpret the data I collect. • Present the data I collect in an appropriate way. • Use the skills I have developed to interrogate a database. • Talk about audience, atmosphere and structure when planning a particular outcome. • Use a range of tools to enhance my animations • Confidently identify the potential of unfamiliar technology to increase my creativity. • Combine a range of media, recognising the contribution of each to achieve a particular outcome.