Computing progression

Skills	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	I can	**I can ...**	**I can...**	**I can ...**	**I can ...**	**I can ...**	**I can ...**
Digital Literacy	**Reception:** **Personal Social Development** Show resilience and perseverance in the face of a challenge **Physical Development** Develop their small motor skills so that they can use a range of tools competently, safely and confidently. Know and talk about the different factors that support their overall health and wellbeing: -sensible amounts of 'screen time'. **Expressive Arts and Design** Explore, use and refine a variety of artistic effects to express their ideas and feelings.	Identify and discuss technology that we can see in, around and outside the school building. Why is it there? How does it work? Identify and discuss technology at home. Use technology purposefully to sort, collate, store and retrieve digital content.	Make links between technology around them, coding and multi-media work done in school e.g. animations. Effectively search and retrieve content using a search engine.	Understand computer networks Understand when to use technology and when it's not useful to do so List ways that the internet can provide different methods of communication. Use some of the methods e.g. email to share information. Search effectively to retrieve digital content	Understand the function, features, layout of a search engine. Appraise digital content at a basic level for credibility. Reuse content on web pages – e.g. copy and paste an image from a website understanding copyright restrictions	To understand computer networks and how they produce multiple services To search with greater complexity using a search engine. To evaluate digital content and be able to identify bias and to explain in some detail how credible a webpage/ information is.	To provide examples of the difference between the World Wide Web and the Internet. To readily apply filters when searching for digital content. To explain in detail how credible a webpage is and the information it contains. Compare a range of digital content sources and rate them in terms of quality and accuracy.
Multimedia		Edit and store simple content and manipulate content to design. Create a story animation using: characters and backgrounds and text	Use a range of media in digital content including photos, text and sound.	Consider what software is most appropriate to a given task. Create a story animation/ interactive resource for a younger child using characters and backgrounds and text – showing understanding of audience	Share digital content within community	**To collaboratively create content and use several different ways of sharing e.g., blogs**	To make clear connections to audience when designing/ making digital content. Design and create their own blogs. Identify and make improvements.
Data Handling	**Early Learning Goals** **Personal Social Development** Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. **Managing Self** Explain the reasons for rules, know right from wrong and try to behave accordingly. **Expressive Arts and Design** **Creating with Materials** Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.	Sort and group a database.	Organise data by using a database. Use a simple database to search and answer a question.	Collect/ analyse, evaluate and present data	Collect/ analyse/ evaluate presentations of data and information.	To collect/ analyse/ evaluate/ present data and information. Where appropriate create charts / graphs to illustrate patterns of information	To create a simple spreadsheet and identify improvements and make refinements.
Programming **Understand algorithms** **Create simple programs** **Debug programs**		Understand an algorithm is a set of instructions and an algorithm written for a computer is a program. Give/ follow single/series of spoken instructions to make things happen (non digital). Write/ follow their own simple algorithm. Work out what is wrong with a simple algorithm when the steps are out of order. Make a good attempt to see the bigger picture of a program e.g.	Explain an algorithm is a set of instructions to complete a task (REPEAT) Give/ follow single/series of spoken instructions to make things happen (non digital) - REPEAT Understand that algorithms need to be precise to be converted into code. Create a simple program and identify/ correct some errors. Begin to identify the cause/ effect in a program.	Give/ follow single/series of spoken instructions to make things happen (non digital) - REPEAT Design and code a program following a simple sequence. Identify an error in their programe and fix it. Build up their knowledge of the programming language e.g. timers Observe, evaluate, modify and improve using logical achievable steps.	Design and write a program for a specific goal Make attempts to debug own program by decomposing problems into smaller parts. Build up their knowledge of the programming language (timers, repetition, variables) Use logical reasoning to explain how their design works and to detect/ correct errors	Give/ follow commands using Lego to create a moving model – test/ debug – REPEAT Design, write and debug programs to accomplish specific goals, including controlling or simulating physical systems. Build up their knowledge of the programming language (sequence, selection, repetition, variables) Use tabs to organise cod and the naming of variables	Turn a more complex program into an algorithm by using decomposition Test and debug their program with logical steps and a systematic approach Coding displays improving understanding of variables Interpret a program in parts and put together separate parts to explain the program as a while. .

		predict where something will end up.					
E-Safety		Begin to understand the School's internet rules – Rights and Responsibilities/ Acceptable Use. Recognise the kind of information that is private (usernames, password) To use an effective username. Understand what to do if you see something on the Internet which makes you feel uncomfortable or worried. Identify some risks presented by new technologies inside and outside the school (online games)	Begin to understand the School's internet rules – Rights and Responsibilities/ Acceptable Use – REPEAT Recognise the kind of information that is private. Talk about to share with others and what they should not. Learn to create effective usernames Explain what to do if you see something on the Internet which makes you feel uncomfortable or worried both in/ out of school. Identify some risks presented by new technologies inside and outside the school (online games, text messages, internet, email)	To know the School's internet rules – Rights and Resp/ Acceptable Use policy. To understand that there are various ways of reporting concerns To create effective password for school use and show awareness of implications of failure to do do. To understand you should only befriend people you know in real life.	To know the School's internet rules – Rights and Resp/ Acceptable Use policy - REPEAT To know a range of ways of how to deal with unpleasant communications via mobile, text, chat rooms To create an effective password for home/ school use. To know ways to check if someone is "real" and understand you should only befriend people you know in real life. To help others to understand the importance of online safety.	To talk about the risks of not following the rules/charter. To demonstrate safe practice when selecting images/content for uploading to a personal profile or online space or downloading. To explain the purpose of passwords and what makes them strong. To explain a positive digital footprint To explain what cyberbullying is. Children relate appropriate online behaviour to their right to personal privacy and mental wellbeing of themselves/ others.	To talk about the risks of not following the rules/charter. To demonstrate safe practice when selecting images/content for uploading to a personal profile or online space or downloading - REPEAT To understand the impact of sharing information on others. To create a strong password and different passwords for different applications. To compare the risks between different social networking sites and how to use safely. To know how to deal with cyberbullying and recognise the value in preserving their privacy online for their own and other people's safety.
Computer skills	To recognise and use the buttons on technology equipment including an age-appropriate mouse	Log on to the computer and open a document. Explain how to log on to the computer and open up a document. Take ownership of work and save work/ documents. Use a mouse. Log off.	Log on to the computer and open a document - REPEAT Explain how to log on to the computer and open up a document. Type a simple sentence/ add a picture. Save a document and log off. Demonstrate mouse control.	Log on to the computer independently and open a document or powerpoint. Create a text box. Use the short cuts to change text (e.g. bold, underlined, italics). . Save work in a file. Demonstrate mouse control.	Log on to the computer independently and open a document or powerpoint. Create a text box. Use the short cuts to change text (e.g. bold, underlined, italics). Add simple animation to powerpoint Save and refind work independently.	Be able to confidently use word/ powerpoint and open a publisher document. Create a spread sheet. Add animations and sound to presentations. Resize pictures/ text as needed. Create folders to save work. Confident mouse control.	Be able to confidently use word/ powerpoint and open a publisher document. Create a spread sheet and use formulas. Add appropriate effects to presentations/ documents. Create folders to save work and publish work as appropriate. Confident mouse control. Know the best method of ICT to use to present work.