



Wigmore Primary School

Computing Progression of Skills 2026

	Computer Science	Information Technology	Digital Literacy
EYFS	I can talk about where I am moving a toy vehicle whilst I am moving it. I can describe the route taken by a toy vehicle. I can follow directions to make a route for a toy vehicle. I can plan a route for a toy vehicle. I can follow my own plan for where the toy vehicle should move.	I can hold a computer mouse with my finger on the correct buttons. I can use a mouse to make the cursor move around the screen where I want it to go. I can click the correct mouse button to play games on the computer. I can use a mouse accurately to click and drag objects on the screen. I can use the mouse roller to scroll up and down a page. I can use a laptop touchpad. I can find all the letters of the alphabet on a keyboard. I can put spaces between words in my typed work. I know how to correct typed work without re-doing it, using the delete keys. I can type capital and lower case letters and know how to change between them. I can type numbers using a keyboard. I know how to move to the next line down when typing. I can use the arrow keys to move around the screen.	I can use a computer or tablet with an adult nearby. I know I should tell an adult if something on a screen worries or upsets me. I know that some things about me are private and should not be shared.

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		I can use the different inputs of a computer keyboard.	
Year 1	Children understand that an algorithm is a set of ordered instructions used to solve a problem or achieve an objective. When they code, they understand that they are turning an algorithm into something the computer can interpret. Children can create simple instructions for someone to follow, building up to a simple program a computer can follow by arranging code blocks. They recognise simple errors, such as the way an object is moving, and attempt to debug in a purposeful way. When looking at simple programs, children use logical reasoning based on the desired algorithm and their knowledge of code blocks to predict outcomes. They focus on objects, their actions, and the events that start those actions. <i>Units: Creating and Following Instructions, Coding</i>	Children can name, save and retrieve their work and follow simple instructions to access online resources. They create and combine digital content such as images, sound and text with a purpose. Children understand what is meant by technology and can identify a variety of examples both in and out of school. They can comment on the specific purpose of the examples they meet. <i>Units: Introduction to Purple Mash, Creative Computing, Data Explorers, Animated Stories, Making Beats, Technology Around Us</i>	Children know their own work belongs to them, save it with a clear name, and understand that work made by other people is not theirs to take. Children follow the rules that keep them safe when using technology at home and in other places. Children begin to find information using search tools and voice assistants. They know that the internet holds things that are real and things that are made up, and that they should ask a trusted adult for help. Children behave online in ways that do not upset others and practise kind, respectful communication. They ask permission before doing things online and communicate with people they know, with adult support. Children learn that information shared online can stay there and be copied. They are introduced to passwords, recognise personal information such as where they live, and know to ask a trusted adult before sharing it. Children know that people online may try to upset or embarrass them, and know when and how to tell a trusted adult.
Year 2	Children can create a computer program from an algorithm they have made, turning each step into code. They recognise that outputs from an on-screen program or a physical device come directly from the instructions they have coded. Children can create programs that include more than one object type. They alter the attributes of objects purposefully and predict and observe the effect, vary the flow of sequences using timer commands, and program buttons to start events. They know unexpected errors come from their	Children know how to access digital content they have created or been assigned. They use a range of software to create and manipulate digital content with purpose, for example building spreadsheets to organise data or merging content from different sources into one file. They know how to save and edit work. Children identify a range of devices that connect to the internet and explain that the internet is used to access websites and find information. They carry out simple keyword searches to find specific	Children learn that content found online often belongs to other people and explain why that ownership should be respected. Children talk about how technology is used at home and in public places, and the guidance that keeps them and others safe in both. Children use simple keywords in search engines and navigate web pages using links, tabs and buttons. They learn that voice assistants are not real people and begin to tell the difference between real and made-up information.

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	own code and debug by reading each line in sequence. Children can identify the parts of a program that respond to specific events and start specific actions. Using a design plan or simple written algorithm, they compare this against how the program runs in play mode. <i>Units: Route Explorers, Coding</i>	information. <i>Units: Creating Pictures, Spreadsheets, Questioning, Presenting Ideas, Making Music, The Internet</i>	Children are introduced to bullying, what it is, how it happens online and how it affects people. They learn that anyone being bullied is not to blame and that help is always available. Children understand that people may use technology to contact strangers and why this can be risky. They practise asking permission, saying no, and respecting other people's choices. Children learn that once information is online it can last a long time and be seen by others. They develop their understanding of passwords, what private means, and that many everyday devices connect to the internet. Children notice that people may look or behave differently online than in person, and learn clear steps for asking for help when something feels worrying.
Year 3	Children's planning of algorithms is increasingly detailed. They identify the logical steps towards a solution and break the overall task into stages, for example planning the route of a turtle. Their familiarity with sequences and timers allows them to read a program. Children can design and code simple sequential programs, using timers to create delay effects. They use a repeating program structure as an efficient alternative to a sequence, for example when drawing simple shapes with a turtle object. Children use logical reasoning and their understanding of algorithms to read and create simple flowcharts for planned or existing programs. They use these to support debugging and begin to consider how nesting code affects the flow of a program. <i>Units: Route Planners, Coding, micro:bit</i>	Children know the ways people communicate with each other, both digital and non-digital. They explore the use of email, know how emails are exchanged, and can read, compose and send their own. Children can identify suitable software for a given task from the Purple Mash tools, for example choosing a spreadsheet tool to calculate or a branching database tool to sort. They create simple databases and spreadsheets to perform calculations and present information. <i>Units: Email, Branching Databases, Spreadsheets, Presentations, Touch Typing</i>	Children explore why copying someone else's work from the internet without permission is unfair and can cause problems. Children consider how too much time on technology can affect health, mood, sleep and relationships, and why some online content carries age restrictions. Children practise using key phrases in search engines and learn about features such as autocomplete. They begin to understand the difference between beliefs, opinions and facts, and how to get help if they see something upsetting. Children discuss why it is important to behave appropriately online, how bullying behaviour may appear, and how someone can seek support. Children explore how people with similar interests meet online and think about the difference between knowing someone online and knowing them in

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			person. They learn that trusting someone online is not the same as liking them, and that it is fine to change their mind. Children practise creating and keeping passwords secure, learn that information should only be shared with people they know and trust, and begin to understand how connected devices collect and share personal information. Children are introduced to the idea of identity and explore how people present themselves online through avatars, gaming characters and profiles.
Year 4	Children can independently design, code, test and debug a simple program. Breaking a task into smaller parts gives them greater understanding of how to achieve the effects they want, and they begin to consider efficiency when structuring code. Children understand how to structure a program to use selection through if and if/else statements. They code more complex algorithms using sequencing, selection and repeat, explain the function of a variable, and create number variables to track things such as scoring. Children can read multi-step programs and accurately predict outcomes. They show more logical approaches to debugging and recognise how different parts of the code interact. <i>Units: Logo, Coding, micro:bit</i>	Children develop their understanding of search engines and how they are used to find relevant information. They obtain focused results from a search query using clear keywords and refined techniques such as quotation marks. Children can effectively use a greater range of software tools and select tools for a purpose, for example audio books, digital animations or musical compositions. They combine digital products, such as inserting music they have composed into an animation they have created. <i>Units: Effective Searching, Unpacking Hardware and Software, Animation, Sound Stories, Composing Beats, Introduction to AI</i>	Children think carefully about who owns content they find online, such as music, images or videos, and whether they have the right to use it. Children recognise how technology can distract them from other activities and discuss strategies for managing screen time. Children learn to judge whether online information is accurate and why making their own decisions matters. They explore how advertising and pop-ups work, and learn about fake news, bots and why many people sharing an opinion does not make it true. Children begin to recognise when others are upset, hurt or angry online, and understand how what they post can affect other people's feelings and their own reputation. Children learn strategies for enjoying online social spaces safely, such as gaming and livestreaming, and practise recognising respectful and unhealthy behaviour. Children explore ways of keeping personal information private, learn that internet use is never fully private and may be monitored, and begin to understand consent, app permissions and the

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			digital age of consent. Children reflect on how their online identity may differ from their offline one, and understand that people online can pretend to be someone else.
Year 5	Children can consider a range of program structures when turning tasks into algorithms. They understand what simulating a physical system means and write programs that decompose these systems and model parts through code, using levels of abstraction and decomposition. Children include sequence, selection and repetition in programs. They recognise when a function will improve the efficiency and readability of their code and can create and use functions. They understand how string and number variables use the system memory to hold information. Children's increased familiarity with a variety of coding structures allows them to read code at a high level and focus logically on the parts they need to debug. They use a mixture of logical reasoning and trial and testing to identify and fix bugs. <i>Units: Coding, micro:bit, Coding: External Devices</i>	Children refine their ability to select and use a growing range of software for a purpose. They create and use a range of digital products including databases, spreadsheets and word processing software. They use software to collect data, manipulate it, interrogate it and produce information based on a specification. <i>Understanding of networks and the internet builds on Year 4 and is developed further in Year 6.</i> <i>Units: Quizzing, Databases, Spreadsheets, Word Processing, Concept Maps, Game Creator</i>	Children begin to assess when it is acceptable to use someone else's work and how to find content that is licensed for reuse. Children develop a deeper understanding of how technology affects health and wellbeing, both positively and negatively. They learn about in-app purchases and loot boxes, and why permission matters before spending money online. Children explore the benefits and limitations of different search technologies, learn what it means to be sceptical, and consider how adverts, targeted content, sponsorship and stereotypes spread online. Children deepen their understanding of how online bullying differs from bullying in person, consider how banter can be experienced as hurtful, and learn how to report bullying, block users and reach helplines. Children explore more forms of online communication and learn that while online communities can be positive, some people may want to cause harm, and that this is never the child's fault. Children learn what makes a strong password, understand that many free apps and services collect and share private information, and are introduced to app permissions. Children learn that online identities can be copied, changed or altered, and think about the choices they make when creating their own.
Year 6	Children understand the advantage of coding	Children can explain the function of networks and	Children use search tools to find content that can be

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	from program design documentation and do this at a deeper level of abstraction, producing accurate algorithms to code. They follow flowcharts to design and debug programs and use decomposition and abstraction confidently to simplify and break down tasks. Children have coding structure understanding and knowledge of a greater range of coding components, using variables, user inputs, cloning and hotspots to add complexity and interactivity. They translate skills gained through block coding into text-based coding in Python. Children default to a logical approach when debugging. They begin debugging at the program design and algorithm stage, so coding becomes more effective with less reliance on trial and error, and they use a step-by-step approach to work through parts of code. <i>Units: Coding, Introduction to Python</i>	the difference between a LAN and a WAN with relevant examples. They understand the difference between the internet and the World Wide Web and can name services as examples of each. Children's use of a range of digital tools shows transferable skill between Purple Mash tools and industry standard software. They use tools with greater sophistication, for example including their own digital artefacts within blogs, graphs within written work, and applying data analysis. <i>Units: Networks, Graphing, Blogging, Data Detectives, Spreadsheets, 3D Modelling</i>	reused by others, and learn to give credit by referencing and acknowledging their sources. Children learn about systems that regulate age-related content, such as PEGI and BBFC ratings, and how persuasive design keeps people online. They learn practical strategies to protect their health, including taking breaks and balancing screen time with sleep, diet and exercise. Children learn in more depth how search engines work and how results are ranked. They evaluate information for reliability and discuss persuasion, manipulation, targeted advertising, and the difference between misinformation and disinformation. Children learn practical strategies for dealing with online bullying, including how to capture evidence and share it with a trusted adult, and how to report bullying in different online contexts. Children think critically about the impact of sharing online, understand that even private sharing can have unintended consequences, and know how to get help if they or someone else feels worried. Children learn to manage and protect passwords, why keeping software up to date matters, and how to recognise and avoid online scams and phishing. Children look critically at online content and discuss how representations of gender, race, religion or disability can be harmful or unfair, and why stereotypes should be challenged.

Outcomes for Years 1 to 6 follow the Purple Mash Computing Scheme Progression of Skills and Knowledge, mapped to the National Curriculum programme of study for computing.

Computer Science covers algorithms and programs, writing and debugging programs, and using logical reasoning. Information Technology covers networks and the internet, search technologies, and selecting, using and combining software. Digital Literacy is taught mainly through 2BeSafe and covers the eight strands of Education for a Connected World.

EYFS statements are Wigmore's own, carried forward and organised into the three strands.