

	<u>Chalfont St Peter Infant School Skills Progression 2024/2025</u> Subject area: Computing National Curriculum Aims - Intent At Chalfont St Peter Infant School, we provide structured sequences of lessons that are varied and link to cross-curricular subjects. Teachers ensure that they have covered the skills required to meet the aims of the National Curriculum. The content allows for a broad, deep understanding of Computing and how it links to children's lives. It offers a range of opportunities for consolidation, challenge and variety. This allows children to apply the fundamental principles and concepts of Computer Science. They develop problem-solving skills and learn to evaluate and apply information technology. It also enables them to become responsible, competent, confident and creative users of information technology. Key stage 1 Pupils should be taught (Implement): ● to revise, analyse and solve problems linking these skills in a cross-curricular pathway including Maths, English etc. ● to develop an appreciation of the digital world and see its place in their future ● to develop the use of algorithms, programming and understand how technology is used safely and purposefully ● to develop knowledge and understanding of keywords and specific language through introducing new vocabulary		
Skill	Early Years	Year 1	Year 2
<u>Computer Science</u>  Understand what algorithms are, how they are implemented as programs on digital devices and that programs execute by following precise and unambiguous instructions.	There are no early learning goals that directly relate to computing objectives, though it is still expected that children will be introduced to appropriate technology and use it within their provision. Children show an interest in technological toys such as IWB, iPads, toys with knobs, pulleys and buttons. Children learn how to operate simple equipment, draw pictures on IWB and begin to change colours They use the iPad to take pictures	Children demonstrate interest in computers in a weekly discrete lesson in the Cocoa Pod. They learn how to navigate the keyboard and develop mouse control skills. Children understand that an algorithm is a set of instructions used to solve a problem or achieve an objective. They know that an algorithm written for a computer is called a program.	Children consolidate computer skills in a weekly discrete lesson in the Cocoa Pod. They gain confidence in the navigation of the keyboard and further develop mouse control skills. Children can explain that an algorithm is a set of instructions to complete a task. When designing simple programs, children show an awareness of the need to be precise with their algorithms so that they can be successfully converted into code.

<u>Computer Science</u>  Create and debug simple programs. 	Children explore how a Bee-Bot works Children use the BeeBots and program them to go forwards and backwards	Children can work out what is wrong with a simple algorithm when the stops are out of order. E. G. The Wrong Sandwich in Purple Mash. They can write their own simple algorithm. E.G. Colouring in a Bird activity. Children know that an unexpected outcome is due to the code they have created and can make logical attempts to fix the code. E.G. Bubbles activity in 2Code. Children use Bee Bots to create simple programs (algorithms) and detect mistakes and correct (debug).	Children can create a simple program that achieves a specific purpose. They can also identify and correct some errors. E.G. Debug Challenges: Chimp. Children's program designs display a growing awareness of the need for logical, programmable steps. Children use Blue Bots to create simple programs (algorithms) and detect mistakes and correct (debug). These are more complex than Bee Bots where children can record their steps for programming.
<u>Computer Science</u> Use logical reasoning to predict the behaviour of simple programs.	Children access, understand and interact with a range of technology within the Year R environment Children draw pictures on IWB, changing colour and pen size Children use the IWB, changing games and programmes	When looking at a program, children can read the code one line at a time and make good attempts to envision the bigger picture of the overall effect of the program. Children can, for example, interpret where the turtle in 2Go challenges will end up at the end of the program.	Children can identify the parts of a program that respond to specific events and initiate specific actions. For example, they can write a cause and effect sentence of what will happen in a program.
<u>Information Technology</u> Use Technology purposefully to create, organise, store, manipulate and retrieve digital content.	Children use Tapestry to add their own observations to their learning journey – taking pictures, adding text and saving Children type their name using a laptop	Children are able to sort, collate, edit and store simple digital content e.g. children can name, save and retrieve their work and follow simple instructions to access online resources. Using Purple Mash with simple 2Dos: 2Quiz example (sorting shapes), 2Code design	Children demonstrate an ability to organise data using for example, a database such as 2Investigate and can retrieve specific data for conducting simple searches. Children are able to edit more complex

		mode (manipulating backgrounds) or using pictogram software such as 2Count. Children use 2Simple – 2Publish to create Art in Computing and add simple text in a cross curricular way.	digital data such as music compositions within 2Sequence. Children use a range of media in their digital context including photos, text and sound. Children use a range of 2Simple software including 2Publish to create Art in Computing and add simple text in a cross curricular way. EG. Pamphlets for advertising or fact files for non-fiction study
<u>Digital Literacy</u> Recognise common uses of information technology beyond school.	Children use the internet with adult supervision and support to find and retrieve information	Children understand what is meant by technology and can identify a variety of examples both in and out of school. They can make a distinction between objects that use modern technology and those that do not. E.g. a microwave vs a chair.	Children can effectively retrieve relevant, purposeful digital content using a search engine. Children must make links between technology that they see around them with regard to coding and multimedia work that they do in school, E.g. animations, interactive coding and programming.
<u>Digital Literacy</u> <u>Online Safety</u>  Use Technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have	Children begin to give reasons why we need to stay safe online Children learn about e-safety using books eg. Digiduck's Big Decision. They learn through online platforms eg. Smartie the Penguin for EYFS Children learn through the online platform 'Think u Know. They watch	Children understand the importance of keeping information, such as their usernames and passwords private and actively demonstrate this in lessons. Children take ownership of their work and save this in their own private space such as their My Work folder on Purple Mash. Children learn about e-safety using books eg. Webster's Friend,	Children know the implications of inappropriate online concerns and how to gain support from adults. Children should begin to understand how things are shared electronically such as posting work to the Purple Mash online resource. They develop an understanding of using email safely by using 2Respond on Purple Mash and know to report

concerns about content or contact on the internet or other online technologies.	e-safety videos for 4-5 yrs entitled: Jessie and Friends – Watching Videos.	Webster’s Bedtime, Webster’s Manners Children learn through online platforms eg. Smartie the Penguin for Year 1. Children learn through the online platform ‘Think u Know. They watch e-safety videos for 5-6 yrs entitled: Jessie and Friends – Sharing Pictures.	to adults when meeting inappropriate content or behaviour. Children learn about e-safety using books eg. Webster’s Email, Chicken Clicking, Troll Stinks Children learn through online platforms eg. Smartie the Penguin for Year 2. Children learn through the online platform ‘Think u Know. They watch e-safety videos for 6-7 yrs entitled: Jessie and Friends – Playing Games.
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