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| Hartford Primary School - Respect, Aspiration, Responsibility, Pride |

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| Computing Curriculum Whole school | | | | | | | | | |
|  | **Autumn** | | | **Spring** | | | | **Summer** | |
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| EYFS | **Technology**: children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes  Completes a simple program on a computer. •Uses ICT hardware to interact with age-appropriate computer software. Early Learning Goal Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes. •Encourage children to speculate on the reasons why things happen or how things work. •Support children to coordinate actions to use technology, for example, call a telephone number. •Teach and encourage children to click on different icons to cause things to happen in a computer program. •Provide a range of materials and objects to play with that work in different ways for different purposes, for example, egg whisk, torch, other household implements, pulleys, construction kits and tape recorder. •Provide a range of programmable toys, as well as equipment involving ICT, such as computer. | | | | | | | | |
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| Year 1  \*Embed across the curriculum | Basic Skills  Handle and log onto laptops, class computer, I pad.  Mouse skills cursor  Word processor/text skills  Save and retrieve  Safe search internet  **Twinkl Year 1 online safety Digital Ambassador visit** | | E-Safety  **Twinkl**  **Hector’s World-CEOP**  **ThinkuKnow**  <https://www.esafety.gov.au/education-resources/classroom-resources/hectors-world> | Algorithms  **Unplugged activities**  Computing At School resources  Twinkl  Espresso- unplugged activities  Safer Internet Day February- Assembly | | Programming -Coding  Unit 1A  Espresso coding  “On the move” | | Algorithms **-**  **Beebots**  **Instructions to create movement** | Programming  Unit 1B  Espresso coding  “Simple inputs” |
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| Year2  \*Embed across the curriculum | At least 6 lessons  On Basic Skills  Basic Skills  Recognise common uses of information technology beyond school  Logging on to a laptop and espresso.  Using a keyboard and mousepad.  Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns  (CEOP,BBC and Twinkl safety) | | Online Safety  iSafe from iCompute  Smartie the Penguin (CEOP)  iSearch (iCompute)  Safe search research  Lives of people in the past?  Algorithms – unplugged activities | Unit 2a Block coding- instructions  Fairy Stories  And or  Algorithms (Primary Computing) | | Unit 2a Block coding –different sorts of inputs And/or  Algorithms (Primary Computing) | | Unit 2b Block coding-using buttons and instructions | iProgram (iCompute)  Word Processing  How to save/retrieve |
| KS1 Objectives | Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. | | Recognise common uses of information technology beyond school. | Create and debug simple programs. | | Use logical reasoning to predict the behaviour of simple programs | | Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions | Use technology purposefully to create, organise, store, manipulate and retrieve digital content. |
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| Year 3  \*Embed across the curriculum | Online safety  CEOP-Think you know  Twinkl | | Programming  Espresso coding  Year 3 starter unit | Skills  Pictograms  Bar charts  Handling data | | Programming  Espresso Unit 3A  Sequence and animation  Scratch | | Skills  Research-online  Safe search  Word processing  Blog | Programming  Espresso Unit 3B  Conditional Events  Selection |
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| Year 4  \*Embed across the curriculum | Programming  Espresso  Year 4 starter unit | | Skills- Romans  Research-online  Power point | Kodu coin quest | | | | Unit 4A Introduction to variables  Unit 4b Repetition and loops | Online safety  Espresso  CEOP  twinkl |
| Year3/4 objectives  :Pupils should be taught to | Recognise common uses of information technology beyond school  Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and co | | Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. | | Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. | | Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. | Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration. | Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. |
| Year 5  \*Embed across the curriculum | Online Safety  Twinkl, CEOP-Think you know  Basic Skills (PowerPoints, Word, emails)  Espresso Starter Unit | | | Espresso Coding  Unit 5A  Speed direction and co ordinates | | | | Espresso introduction to HTML Unit 1 | Espresso Coding  Unit 5B  Random numbers and simulations |
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| Year 6  \*Embed across the curriculum | Scratch –make a computer game to help a younger child at maths.(Primary Computing)  **Creating your own numeracy games** | | | KOMO Animation (linked to Conway Trip) | | | | Espresso coding  iProgram **(iCompute)**  [**iCompute\iProgram UKS2\iProgram Year 6\Unit Plan\Y6-iProgram Unit Plan.pdf**](file:///C:\Users\sgraham\Desktop\Computing\Long%20Term%20planning\iCompute\iProgram%20UKS2\iProgram%20Year%206\Unit%20Plan\Y6-iProgram%20Unit%20Plan.pdf) | iNetwork  [**iCompute\iNetwork Y6\Unit Plan\Y6-iNetwork Unit Plan.pdf**](file:///C:\Users\sgraham\Desktop\Computing\Long%20Term%20planning\iCompute\iNetwork%20Y6\Unit%20Plan\Y6-iNetwork%20Unit%20Plan.pdf)  iApp  iCompute\iApp Y6\Unit Plan\Y6-iApp  Green Screen Performance |
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| Year 5/6  objectives | Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and co | Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. | Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. | Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. | | Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration. | | Understand computer networks including the internet: how they can provide multiple services, such as the world wide web, and the opportunities they offer for communication and collaboration  Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. | Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. |
| All Year Groups have access to espresso coding (Teachers to download and read lesson plans prior to children starting on the units)  Hour of Code – also valuable teaching resource in addition to above resources.  Twinkl is available for e safety | | | | | | | | | |