

DINNINGTON FIRST SCHOOL – COMPUTING PLANNING OVERVIEW – YEAR 1 TO YEAR 4

<u>YEAR 1</u>	<u>E Safety</u>	<u>Computer Science</u>	<u>Digital Literacy</u>	<u>Information Technology</u>
<u>Key Stage 1 National Curriculum Objectives</u>	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.	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs	Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	Recognise common uses of information technology beyond school
<u>Year 1 Activities & Resources</u>	<p>Termly + Safer Internet Day</p> <p>Make children aware of some of the risks to using the internet. Use the CEOP Thinkuknow resources, based on Hector's World: http://www.thinkuknow.co.uk/5_7/hectorsworld/</p> <p>Ask the children who they can talk to if they have any concerns when using the internet? Show the following video – Child Focus 'E-Safety': http://www.youtube.com/watch?v=d5kW4pl_VQw</p> <p>South West Grid for Learning (swgfl) digital literacy units of work with related resources for each year group</p> <p>Revisit termly and when relevant to computing related work/PSHE</p>	<p>Code.org course 1 - lessons 1 to 8.</p> <p>What is an algorithm? Use vocabulary in other curriculum areas e.g. algorithm for a story.</p> <p>Navigate children to accomplish a goal, instructions. Learning of directional language in P.E.</p> <p>I pads – choose from scratch junior app, blue bot app, Toca Boca Hair Salon on the I pad to sequence instructions.</p> <p>Hardware - Program a floor robot. Bee-Bots on I pads to show simple algorithm.</p>	<p>Computers - Switching a computer on/off. Logging on/off, Saving work, printing. Copy and pasting, Typing skills in Purple Mash. Basic web navigation skills.</p> <p>I pads - Record teacher directed video, photos or sound on I pads.</p> <p>Simple graphing programs – http://www.topmarks.co.uk/maths-games/5-7-years/data-handling</p>	<p>Technology hunt – identify a wide range of and label technology used in the home at school. What is it used for? Why is it helpful?</p> <p>School website Class blog</p>

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<u>YEAR 2</u>	<u>E Safety</u>	<u>Computer Science</u>	<u>Digital Literacy</u>	<u>Information Technology</u>
<u>Key Stage 1 National Curriculum Objectives</u>	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.	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs	Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	Recognise common uses of information technology beyond school
<u>Year 2 Activities & Resources</u>	<p>Termly+ Safer Internet Day</p> <p>About personal information and that we must keep it safe. http://www.thinkuknow.co.uk/5_7/hectorsworld Teach children what cyberbullying is and why it wrong. Introduce the children to online bullying – use the following Garfield video to aid discussion: https://learninglab.org/ Children to produce their own set of rules for how they should behave while they are online.</p> <p>South West Grid for Learning (swgfl) digital literacy units of work with related resources for each year group Revisit termly and when relevant to computing related work/PSHE</p>	<p>Code.org course 1 lessons 8 to 18. (initially can begin at 1 depending on ability) Code.org hour of code activities</p> <p>I pads – choose from - Scratch Junior on I pads for programming – investigate changing values, what happens if? Blue Bot App. Run Marco Daisy the Dinosaur</p> <p>Hardware – Programming OZOBOT https://portal.ozobot.com/lessons</p>	<p>Microsoft office / Purple Mash - Saving work, Copy and pasting , resizing images. Entering and changing text; altering fonts and sizes. Independently save, print, retrieve work. Add images and sounds to work.</p> <p>I pads - Book creator -add images, video & sound. Inkle Writer Comic Life</p> <p>Simple graphing programs – http://www.topmarks.co.uk/maths-games/5-7-years/data-handling</p>	<p>Researching information independently .</p> <p>Technology in everyday lives/industry</p> <p>Toco class e mail. Class Blog</p>

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<u>YEAR 3</u>	<u>E Safety</u>	<u>Computer Science</u>	<u>Digital Literacy</u>	<u>Information Technology</u>
<u>Key Stage 2 National Curriculum Objectives</u>	Use technology safely, respectfully and responsibly; recognise acceptable /unacceptable behaviour; identify a range of ways to report concerns about content and contact.	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	Select, use and combine a variety of software 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	Use search technologies effectively - Appreciate how [search] results are selected and ranked. Children have a basic understanding of how the internet works and how they can access it.
<u>Year 3 Activities & Resources</u>	Termly + Safer Internet Day Discuss how the internet can be used to communicate online- online games and social networking. Discuss with children 'netiquette' for on line use, including text. Explain and give examples of online dangers or cyberbullying and the consequences of this, such as, depression, anxiety, sadness and loneliness. Teach the importance of being a responsible digital person, include implications of text and picture sending. South West Grid for Learning (swgfl) digital literacy units of work with related resources for each year group.	Code.org course 2 lessons 1 to 10. Code.org hour of code activities. Purple Mash - 2 code Chimp Level coding. I pads - Hopscotch programming Scratch Kids Lite– tutorials are a good introduction to programming using scratch. Kodable Kids n code Hardware – Programming OZOBOT https://portal.ozobot.com/lessons	Microsoft office – Word used to create a newspaper report with inserted image and varied text formatting. Purple mash – word processing for topic. E-Mail- Purple mash I pads -Toco –for class communication. Book creator – add images, video & sound. Inkle Writer Comic Life Animation – Zu3D I pads	Topic related research, with key questions/key word searches. Understand how google results are ranked. E safety around responsible searching, including images. Technology in everyday lives/industry School website Class blog

DINNINGTON FIRST SCHOOL – COMPUTING PLANNING OVERVIEW – YEAR 1 TO YEAR 4

<u>YEAR 4</u>	<u>E Safety</u>	<u>Computer Science</u>	<u>Digital Literacy</u>	<u>Information Technology</u>
<u>Key Stage 2 National Curriculum Objectives</u>	Use technology safely, respectfully and responsibly; recognise acceptable /unacceptable behaviour; identify a range of ways to report concerns about content and contact.	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	Select, use and combine a variety of software 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	Use search technologies effectively - Appreciate how [search] results are selected and ranked. Children have a basic understanding of how the internet works and how they can access it.
I	<p>Termly + Safer Internet Day</p> <p>Ensure children are able to protect themselves online. Discuss what information children share on the internet and the importance of protecting our personal information online, cyberbullying. http://www.bbc.co.uk/learningzone/clips/keeping-your-personal-information-safe-online/5594.html http://www.att.com/Common/images/safety/game.html http://www.bbc.co.uk/newsround/26136189 (cyberbullying) 'Report Abuse' CEOP button. South West Grid for Learning (swgfl) digital literacy units of work with related resources for each year group.</p>	<p>Code.org course 2 lessons 11 to 19. (initially can begin at earlier, depending on ability) Code.org hour of code activities. Purple Mash 2 code Gorilla Level Scratch Programming - Code club opportunity</p> <p>I Pads- Tynker Programming Toca Builder</p> <p>Hardware – BBC Microbit Programming http://microbit.org/code/</p>	<p>Microsoft Word & Powerpoint – Continue to develop word processing skills. Apply them to create persuasive posters and presentations. required. Microsoft Excel is used to enter survey data, create various graphs and discuss relevance to the data Data Logger in science to record sound, temperature or light. I pads – Photo editing and green screen effects linked to fake news. Comic Life</p>	<p>Topic related research with key questions/key word searches. E safety around responsible searching, including images. Present how the internet works on a very basic level, this YouTube clip gives a good introduction: http://thekidshouldseethis.com/post/26674356049 Introduce the changes in technology over time. https://www.youtube.com/watch?v=1aileBcKBi8 or https://www.youtube.com/watch?v=UFwWWsz_X9s Class blog</p>

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