



St Leo's and Southmead Catholic Nursery and Primary School

Computing Progression of Skills

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Essential: Age appropriate skills for the use of core devices and applications within their setting.	1. I can do the basics with technology. 2 I can take a good quality photograph and video on an iPad/digital camera	1. I can save, share and retrieve my digital work. 2 I can use technology to organise and present my ideas.	1. I can troubleshoot when something doesn't appear to be working with my device. 2 I can discuss different types of digital content and file types.	1. I can label the different types of input connections on devices. 2 I can explain common file types	1. I can make a QR codes that links to my own work. 2 I can film and produce a short video.	1. I can collaborate to create digital content. 2 I can create a consistent design for my presentation, and present to others.
CS) Computational Thinking: Key Stage 1: Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Key Stage 2: Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.	3. I can follow a simple algorithm and create a simple sequence algorithm using symbols that solve a problem. 4 I can create algorithms that can be turned into a program using a robot or digital device.	3. I can plan out an algorithm with a sequence of commands to carry out specific tasks.	3. I can plan, create and debug programs. 4 I can use decomposition to help me solve computing problems.	3. I can design an algorithm to simulate a real-life situation. 4 I can solve an open-ended problem by breaking it up into smaller parts.	3. I can decompose a problem, design an algorithm and use this to write a program. 4 I can design and write	3. I can design, plan & create a complex programs. 4 I can test, debug and modify a program to improve it.

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(CS) Coding: Key Stage 1: Create and debug simple programs. Key Stage 2: Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.	5. I can independently debug simple sequence errors in a program.	4. I can identify 'bugs' in computer programs and use the term debug in context. 5 I can create a simple repeat loop. 6 I can create a simple game program.	5. I can use sequence, selection, repetition and variables in programs. 6 I can work with various forms of input and output.	5. I can design and write a program for a given purpose including specific programming features.	5. I can use variables, conditional statements, procedures & repeat commands to improve programs.	5. I can write a program using a text based programming language.
(CS) Logical Reasoning: Key Stage 1: Use logical reasoning to predict the behaviour of simple programs. Key Stage 2: Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	I can independently debug simple sequence errors in a program.	7. I can predict the outcome of a sequence of blocks in Scratch.	7. I can use logical reasoning to predict and correct errors in algorithms and programs.	6. I can test existing programs to see how they could be improved.	6. I can use logical reasoning to detect & debug a program.	6. I can use logical reasoning to detect and correct errors in algorithms and programs.
(CS) Networking: Key Stage 1: N/A Key Stage 2: Understand computer networks including the internet; how they can provide multiple services, such as the World Wide Web.			8. I can explain how the internet works.	7. I can understand the different methods of communication using the internet.	7. I can explore networks and internet traffic. 8 I can translate binary numbers to decimal. 9 I can create a basic web page using HTML.	7. I understand how computer networks work, including the internet.
(CS) Online: Key Stage 1: N/A Key Stage 2: Appreciate how [search] results are selected and ranked.			9. I can explain how a search engine works			8. I can talk about the way search results are selected and ranked.

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IT) Harnessing Technology: Key Stage 1: Use technology purposefully to create, organise, store, manipulate and retrieve digital content. * Key Stage 2: 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.	7. I can use technology to create and present my ideas. 8 I can organise and store my digital work. 9 I can collect and sort data.	8. I can use design and formatting to enhance my digital work. 9 I can create with technology. E.g. Video, animation, 3D 10 I can collect and record data purposefully.	10. I can improve the quality and presentation of my work. 11 I can create with technology. E.g. Video, animation, 3D 12 I can collect, analyse, evaluate and present data and information	8. I can improve the quality and presentation of my work using editing and formatting techniques. 9 I can create with technology. E.g. Video, animation, 3D	10. I can record and produce a podcast / audio clips. 11 I can use unfamiliar technology to create content. 12 I can improve the quality and presentation of my work. 13 I can use a spreadsheet to collect and record data.	9. I can create and combine a range of media in order to produce digital content. 10 I can improve the quality and presentation of my work using editing and formatting techniques. 11 I can create a digital storyboard to plan a project or investigation.
(IT) Online: Key Stage 1: N/A Key Stage 2: Use search technologies effectively.			13. I can use advanced search tools.	10. I can use a search engine and I am aware that not everything I read online is correct. (Online Bullying)	14. I can use a search engine and I am aware that not everything I read online is correct.	12. I can use a search engine and I am aware that not everything I read online is correct and that other people may be attempting to influence my opinions.
(DL) Technology in the Real World: Key Stage 1: Recognise common uses of information technology beyond school. Key Stage 2: Understand	10. I can recognise the ways we use technology in our classroom, my home and community	11. I can give examples of how technology is used to communicate beyond school	14. I know how to use the internet.	11. I can collaborate online to create digital content.	15. I can access school email and can send emails to classmates and teacher. 16. I can create a	13. I can explain how to protect my computer or device from harm on the Internet.

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the opportunities [networks] offer for communication and collaboration		17. I know the rules of using technology at home or in school. (Health well being)			subject specific vlog and understand the potential risks of sharing content online. 17. I can collaborate to develop & improve work.	
(DL) Media & Content: Key Stage 1: N/A Key Stage 2: Be discerning in evaluating digital content.			15. I can analyse information and make accurate searches. 16 I understand the need for copyright and the consequences of ignoring it.	12. I can evaluate information presented to me to make informed choices about what is Fake News	18. I can search for someone online and create a summary report about that person. 19. I understand the need for copyright and the consequences of ignoring it.	14. I understand the need for copyright and the consequences of ignoring it.
(DL) Online Safety: Key Stage 1: 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. Key Stage 2: Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of	11 I can use a search engine. 12. I understand something online may upset and know where to find help it anything does, 13. I can communicate politely via the internet. 14 I understand that once something it posted you lose control if it. 15 I can describe how to behave online in ways that	12. I understand that somethings online may upset me and that I cannot trust everyone online. (Self Image) 13 I can use online services to communicate safely. (Online Relationships) 14 I understand that once something it posted you lose control if it and know how to get help if I need to. (Online Reputation)	17. I am aware of what I should be sharing online and where to go for help if I need it. 18 I understand that I cannot trust everyone I talk to online, that I should be a good digital citizen and where to go for help if something upsets me online. 19 I can explain what bullying is and know where to go for help. 20 I understand the	13. I can describe strategies for safe and fun experiences in a range of online social environments and I'm respectful to others online. (Online Relationships) 14 I understand that people may have a different online identity to that in real life and am able to interact with others. (Self Image) 15 I am aware others can find information	am aware that there are people online who may try to upset me and my group of friends. I make a positive contribution to my online community. 21 I understand the impact online bullying can have and I know what to do if I am the victim or I witness online bullying. 22 I understand the impact technology can have on my	15. I support my friends to protect themselves and make good choices online, including reporting concerns to an adult. 16 I am aware of the ways in which the media can shape our ideas about gender. 17 I am aware that if I need help I keep asking for it until I get help. 18 I am aware of the

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ways to report concerns about content and contact.	<p>do not upset others and can give examples.</p> <p>16 I know the rules of using technology at home or in school.</p> <p>17 I can explain what personal information is and give examples of it.</p> <p>18 I am aware that content online is owned by the person that created it.</p>	<p>15 I can give examples of online bullying behaviour, I understand the impact it may have and I know where to go for support. (Online Bullying)</p> <p>16 I can use a search engine and I am aware that not everything I read online is true. (Online Bullying)</p> <p>18. I can explain what personal information is and understand the need for passwords to protect it. (Privacy and Security)</p> <p>19 I am aware that content online is owned by the person that created it. (Copyright)</p>	<p>impact technology can have on my health, well being and lifestyle.</p> <p>21 I know who I should be sharing information with and how to keep my data secure.</p> <p>22 I understand the term identity and I can take appropriate measures to protect my own online identity.</p>	<p>out about me by searching online. (Online Reputation)</p> <p>16 I know which technologies are used for online bullying and I am considerate of others when posting myself. (Online Bullying)</p> <p>17 I understand the impact technology can have on my health, well being and lifestyle. (Health well being)</p> <p>18 I am aware that some people want to access my data and can take appropriate measures to ensure this doesn't happen. (Privacy and Security)</p> <p>19 I understand the need for copyright and the consequences of ignoring it. (Copyright)</p>	<p>health, well being and lifestyle.</p> <p>23 I can create a strong password and understand the real cost of some apps.</p> <p>24 I am aware that my identity can be copied by other users and take appropriate measure to minimise the risk of this happening.</p>	<p>need for positive online relationships and I am mindful of others feelings at all times</p> <p>19. I understand I need to create a positive online reputation.</p> <p>20. I know how to capture evidence of online bullying and how to report it.</p> <p>21. I know how to keep my data private and secure.</p> <p>22. I understand the impact technology can have on my health, well being and lifestyle.</p>
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