## Christ Church Computing Curriculum

Throughout all year groups, children should continue to be taught about e-safety and the risks that the internet could pose. They need to be reminded about what to do if they come across unsuitable content — remind children about who their trusted adults are and who to talk to if they are unsure about something that they find or see on the internet. It is also important to remind children across both Key Stages of the dangers of playing online games at home as part of their e-safety discussion.

Year	Curriculum	Non-Negotiables
Reception	<ul> <li>Begin looking at algorithms e.g. following a set of instructions — making a sandwich, giving a friend instructions on how to build a tower</li> <li>Introduce BeeBot to children and how to programme them with simple instructions using 'up', 'down' etc.</li> </ul>	<ul> <li>Know how to log on</li> <li>Use left click on a mouse</li> <li>Double click</li> <li>Switch monitor/modem on and off</li> <li>Use caps lock</li> <li>Use iPads to open apps and take their own photos</li> </ul>
By the end of Year 1	<ul> <li>I understand what algorithms are.</li> <li>I know how algorithms are implemented as programs on digital devices</li> <li>I know that programs execute by following precise and unambiguous instructions</li> <li>I can use technology purposefully to create, store and retrieve digital content</li> <li>I recognise common uses of information technology in school and at home.</li> <li>I know how to use technology safely and respectfully, keeping personal information private;</li> <li>I know where to go for help and support when I have concerns about material on the internet</li> </ul>	<ul> <li>Log on without needing to use name card/password prompts</li> <li>Begin to solve logging on problems themselves — e.g. is there a space before or after their name that shouldn't be there?</li> <li>Begin to use right click on mouse</li> <li>Begin to use start and open internet</li> <li>Open word/PowerPoint/excel</li> <li>Use images from files and put them into document.</li> <li>Find folders on public drive with prompts</li> <li>Find and open frequently used programmes such as Seesaw, Lexia, My Maths, Spelling Shed, Purple Mash, TT Rockstars</li> </ul>

By	the	end
of	Yea	ır 2

- I can create and debug simple programs
- I can use logical reasoning to predict the behaviour of simple programs
- I can use technology purposefully to create, organise, store, manipulate and retrieve digital content
- I recognise common uses of information technology in school and beyond school
- I know how to use technology safely and respectfully, keeping personal information private;
- I know where to go for help and support when I have concerns about material on the internet

- Log on without needing to use name card/password prompts
- solve logging on problems themselves e.g. is there a space before or after their name that shouldn't be there?
- Use right click on mouse
- Use start and open internet
- Open word/PowerPoint/excel and understand what it is used for
- Use images from files and put them into document.
- Save own images from the internet and use them in a document
- Find folders on public drive without prompts
- Find and open frequently used programmes such as Seesaw, Lexia, My Maths, Spelling Shed, Purple Mash, TT Rockstars

## By the end of Year 3

- $\bullet\ \ I$  can create and debug simple programs
- I can use logical reasoning to predict the behaviour of simple programs
- I can work with variables and various forms of input and output
- I understand computer networks including the internet.
- I understand how computer networks including the internet can provide multiple services, such as the world-wide web.
- I can use search technologies effectively and be discerning in evaluating digital content

- Save work in shared drive and retrieve work correctly
- Search, save and use images confidently
- Begin to change font size, colour etc.
- Begin to use shift, caps lock when typing.
- Begin to use ctrl functions e.g. to save, print, open
- Resize pictures and ensure they are integrated correctly into documents with prompts.
- Begin to add text boxes and word art
- Use iPads to take videos and pictures themselves.
- Begin to work from more than one window at a time using minimising
- Begin to select appropriate chart to present data using excel

	<ul> <li>I know how to use technology safely, respectfully and responsibly;</li> <li>I know a range of ways to report concerns and inappropriate behaviour</li> </ul>	• Type web addresses correctly  Scratch — drag and drop blocks themselves following instructions, begin to debug and separate blocks if incorrect. Internet — know to switch between explorer and chrome. Search effectively using correctly spelled key words (may be provided on a word bank)
By the end of Year 4	<ul> <li>I can create and debug simple programs</li> <li>I can use logical reasoning to predict the behaviour of simple programs</li> <li>I can work with variables and various forms of input and output</li> <li>I understand computer networks including the internet.</li> <li>I understand how computer networks including the internet can provide multiple services, such as the world-wide web.</li> <li>I can use search technologies effectively and be discerning in evaluating digital content</li> <li>I know how to use technology safely, respectfully and responsibly;</li> <li>I know a range of ways to report concerns and inappropriate behaviour</li> </ul>	<ul> <li>Save work in shared drive and retrieve work correctly</li> <li>Search, save and use images confidently</li> <li>Independently change font – size, colour etc.</li> <li>Use shift, caps lock etc when typing.</li> <li>Use ctrl functions e.g. to save, print, open</li> <li>Resize pictures and ensure they are integrated correctly into documents with prompts.</li> <li>Use iPads to take videos and pictures themselves.</li> <li>Confidently work from more than one window at a time using minimising</li> <li>Add text boxes</li> <li>Select appropriate chart to present data using excel</li> <li>Type web addresses correctly</li> <li>Scratch – drag and drop blocks themselves following instructions, begin to debug and separate blocks if incorrect. Internet – know to switch between explorer and chrome.</li> <li>Search effectively using correctly spelled key words (may be provided on a word bank)</li> </ul>
By the end of Year 5	<ul> <li>I can design, write and debug programs that accomplish specific goals, including controlling</li> </ul>	Use word to insert text boxes, change font, add images.

- or simulating physical systems; solve problems by decomposing them into smaller parts
- I can use sequence, selection, and repetition in programs.
- I can work with variables and various forms of input and output
- I can use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- I know how to use technology safely, respectfully and responsibly;
- I know a range of ways to report concerns and inappropriate behaviour
- I understand the opportunities computer networks including the internet offer for communication and collaboration
- I can use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- I can select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

- Cut/paste and edit beginning to use keyboard shortcuts for this
- Know that if you accidentally delete something to use 'ctrl + Z' to retrieve it
- Present information on PowerPoint include bullet points, pictures begin to use transitional effects
- Excel Begin to use appropriate tables and charts to present data. Begin to use formulas to calculate answers
- Publisher create different documents e.g. 2-sided leaflets or posters

Scratch – solve problems using debugging methods.

## By the end of Year 6

- I can design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- Use word to insert text boxes, change font, add images.
- Cut/paste and edit independently use keyboard shortcuts for this
- Know that if you accidentally delete something to use 'ctrl + Z' to retrieve it

- I can use sequence, selection, and repetition in programs.
- I can work with variables and various forms of input and output
- I can use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- I know how to use technology safely, respectfully and responsibly;
- I know a range of ways to report concerns and inappropriate behaviour
- I understand the opportunities computer networks including the internet offer for communication and collaboration
- I can use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.
- I can select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

- Present information on PowerPoint include bullet points, pictures use transitional effects
- Excel Use appropriate tables and charts to present data. Use formulas to calculate answers
- Publisher create different documents e.g. 2-sided leaflets or posters

Scratch – solve problems using debugging methods.