

Springvale Primary School Computing Curriculum Intent

Computing

Ethos and rationale: At Springvale Primary School, we intend on providing our children with the Computing skills and knowledge they will need in secondary school and adult life. Technology moves very quickly and we have identified the need for children to develop a logical and computational approach to solving new problems. This, along with allowing children to use a broad range of software, will help them to grasp new technology and coding problems in the future.

We also recognise that children need to identify the value technology can bring to their daily lives but when it is not appropriate or does not add value. Similarly, we recognise that children need to understand how to be safe and respectful with technology, especially in today's increasingly connected world.

To deliver the Computing curriculum effectively, we have divided it into three key strands:

- Online Safety
- Computer Users
- Computer Programmers

EYFS

Knowledge (I know therefore...)	Strand/ELG	Skills (...I can)
I know what things are nice to say to others. I know that some things we say might make others upset. I know people around me need support and kind words. I know people might be upset if I damage their things.	Personal, Social and Emotional Development	I can treat others and their things with respect
I know what different computers look like. I know what jobs use computers. I know where we have computer technology in my school and my home.	Understanding the world	I can recognise technology and computers.
I know some things need to be done in the right order. I know things can be done in different ways. I know that I can try again if it doesn't work the first time.	Physical Development	I can solve puzzles
I know what different mouse pointers look like (E.g. the finger pointer on a hyperlink, arrow and cursor on text) I can find the mouse pointer on the screen I know how to left click I know how to right click I know how to double click I know how to click and drag	Computer Users/Understanding the World	I can use a mouse

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I know that I need to move my hand carefully to control my **mouse pointer** accurately

NATIONAL CURRICULUM

Key stage 1 (COVERED IN Y1, COVERED IN Y2)

Pupils should be taught to:

- 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
- 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.

Year 1

Intent

Knowledge (I know therefore...)	Strand	Skills (...I can)
I know what personal information is. I know who I can trust with my personal information.	Online Safety	I can use technology safely
I know what symbols found on power buttons can look like I know what power buttons on different computers I know where the 'start' button on the computer desktop I know I need to click the shut down option on the start bar. I know where the lock/unlock button is on an iPad I know you do not press the power button for the screen	Computer Users	I can switch a computer on and shut it down.
I know what the app icon of the app I need to use looks like	Computer Users	I can create something on a/an iPad/computer

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<p>I know to tap on the app I have been told to use</p> <p>I know what the shortcut for the programme I have been asked to use look like.</p> <p>I know I need to double click on the shortcut of the programme I have been told to use</p> <p>I know that I need to save my work.</p>		
<p>On a lowercase keyboard, I can find the letters in my name.</p> <p>I know I need to press the space bar for finger spaces</p> <p>I know what the letters on the home row are</p> <p>I know what the letters on the top row are</p> <p>I know what the letters on the bottom row are</p> <p>I know where punctuation that is appropriate for me is (full stops etc)</p> <p>I know that I start a new line using the enter key</p> <p>I know where the letters on a capital QWERTY keyboard are</p>	Computer Users	I can use a keyboard
<p>I know what different mouse pointers look like (E.g. the finger pointer on a hyperlink, arrow and cursor on text)</p> <p>I can find the mouse pointer on the screen</p> <p>I know how to left click</p> <p>I know how to right click</p> <p>I know how to double click</p> <p>I know how to click and drag</p> <p>I know that I need to move my hand carefully to control my mouse pointer accurately</p>	Computer Users	I can use a mouse
<p>I know what you can use different programmes for.</p> <p>I know how the programmes are different differences between them.</p> <p>I have used at least two different programmes or apps.</p>	Computer Users	I can use at least two different programmes
<p>I know what folders are.</p> <p>I know that you open a folder by double clicking.</p> <p>I know what files can look like.</p> <p>I know you double click a file to open it.</p>	Computer Users	I can open a file
<p>I know what save buttons can look like.</p> <p>I know where the save button is in the programmes I use.</p> <p>I know what to call my file so I can remember it. (Using my name)</p>	Computer Users	I can save a file
<p>I know that the scroll bar is at the side of the page.</p> <p>I know you need to click and drag it to move up and down.</p> <p>I know I can use the scroll wheel on the mouse to move up and down.</p> <p>I know where the back button is.</p> <p>I know how my mouse changes when it is on a link.</p> <p>I know the check with an adult before I click a link.</p>	Computer Users	I can use a website
<p>I know computers only do exactly what they are programmed to do.</p> <p>I know instructions should be sequenced (in order).</p> <p>I know my instructions need to be clear and simple.</p>	Computer Programmers	I can write simple instructions (an algorithm).

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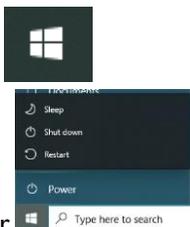
<p>I know different direction words like up, down, left, right, north, east, south, west, forwards, backwards and turn.</p> <p>I know that you need something to start or run the programme.</p>				
AUTUMN ASSESSMENT STATEMENTS	AUTUMN VOCABULARY			
<p><u>Online Safety</u> I can use technology safely I know what personal information is. I know who I can trust with my personal information.</p>	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"> Mouse Keyboard Left click Right click Double click Drag Keyboard Screen Type </td> <td style="width: 50%; border: none;"> Information Personal Shut down Home row Enter Arrow Cursor App Icon </td> </tr> </table>		Mouse Keyboard Left click Right click Double click Drag Keyboard Screen Type	Information Personal Shut down Home row Enter Arrow Cursor App Icon
Mouse Keyboard Left click Right click Double click Drag Keyboard Screen Type	Information Personal Shut down Home row Enter Arrow Cursor App Icon			
<p><u>Computer Users</u> I can use a keyboard On a lowercase keyboard, I know where the letters in my name are. I know I need to press the space bar for finger spaces I know what the letters on the home row are I know what the letters on the top row are I know what the letters on the bottom row are I know where punctuation that is appropriate for me is (full stops etc) I know that I start a new line using the enter key I know where the letters on a capital QWERTY keyboard are</p>				
<p>I can use a mouse I know what different mouse pointers look like (E.g. the finger pointer on a hyperlink, arrow and cursor on text) I can find the mouse pointer on the screen I know how to left click I know how to right click I know how to double click I know how to click and drag I know that I need to move my hand carefully to control my mouse pointer accurately</p>				
<p>I know how to use a mouse or a keyboard in different software.</p>				

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I know how to switch on and off a computer

I know what symbols found on power buttons can look like
I know what power buttons on different computers look like

I know where the 'start' button on the computer desktop is.



I know I need to click the **shut down** option on the start bar.

I know where the lock/unlock button is on an iPad

I know you do not press the power button for the **screen**

I can create something on a/an iPad/computer

I know what the app **icon** of the app I need to use looks like

I know to tap on the **app** I have been told to use

I know what the **shortcut** for the programme I have been asked to use look like.

I know I need to double click on the shortcut of the programme I have been told to use

I know that I need to **save** my work.

I can use different programmes.

I know what you can use different programmes for.

I know how the programmes are different differences between them.

I have used at least two different programmes or apps.

AUTUMN IMPACT ARE % GD %

Helpful resources and web links:

Online Safety

- Code.org (course A: lesson 1)
- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/759003/Education_for_a_connected_world_PDF.PDF
- CommonsenseEducation (Grade1): <https://www.commonsense.org/education/digital-citizenship/curriculum>

Computer Users

Mouse Control:

<http://wallarano-ps-ict.weebly.com/mouse-control-games.html>

Pupils Not Meeting Target

Actions to address...

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Code.org Course A: Lesson 2

Keyboard:

<http://primarygamesarena.com/Play/Keyboard-2030>

https://www.abcya.com/games/keyboard_challenge

Creating Digital Content:

Twinkl Painting Unit: <https://www.twinkl.co.uk/resource/tp-i-0068-planit-computing-year-1-painting-unit-pack>

PC: 2 Simple, Paint, Word

iPad: Brushes Redux

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SPRING ASSESSMENT STATEMENTS	SPRING VOCABULARY	
<p>Computer Users I can open a file I know what folders are. I know that you open a folder by double clicking. I know what files can look like. I know you double click a file to open it.</p> <p>I can save a file I know what save buttons can look like. I know where the save button is in the programmes I use. I know what to call my file so I can remember it. (Using my name)</p> <p>I can create something on a/an iPad/computer I can open the app or programme I have been told to use I can recognise the app icon of the app I need to use I can open a computer programme I have been told to open I can double click on the shortcut of the programme I have been told to use I know that I need to save my work.</p>	<p>Autumn vocab plus...</p> <p>App Programme Icon Open Save Edit Folder File Double click</p>	
SPRING IMPACT ARE % GD %		
<p>Helpful resources and web links: Computer Users Creating Digital Content: Twinkl Painting Unit: https://www.twinkl.co.uk/resource/tp-i-0068-planit-computing-year-1-painting-unit-pack Saving work: https://www.twinkl.co.uk/resource/tp-i-0019-planit-computing-year-1-computer-skills-lesson-3-folders-and-save-lesson-pack PC: 2 Simple, Paint, Word iPad: Brushes Redux</p>	Pupils Not Meeting Target	Actions to address...

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SUMMER ASSESSMENT STATEMENTS		SUMMER VOCABULARY	
<p>Computer Programmers I know computers only do exactly what they are programmed to do. I know instructions should be sequenced (one after the other and in the right order). I know my instructions need to be clear and simple. I know different direction words like up, down, left, right, north, east, south, west, forwards, backwards and turn. I know that you need something to start or run the programme.</p>		<p>Algorithm Program Steps Up, Down, Left, Right North, South, East, West Forwards, Backwards, Left, Right Turn Start Run Programmed Sequence</p>	
SUMMER IMPACT ARE % GD %			
<p>Helpful resources and web links: Unplugged activities: Writing Algorithms: Spheros using Sphero play blocks Code.org: Course A: Lesson 3, 4, 5 iPad: ScratchJr: https://www.twinkl.co.uk/resource/tp-i-0114-planit-computing-year-1-programming-with-scratchjr-unit-pack Light bot (iPad): level 1</p>		Pupils Not Meeting Target	Actions to address...
Year 2			
Implementation			
Knowledge (I know therefore...)	Strand	Skills (...I can)	
I know how to balance time on and off devices I know what information should be private and what is ok to share I know what to do if someone is mean online I know that I have to give credit to other people's work	Online Safety	I can be safe and respectful when I use technology.	
I know what the save button looks like I know how to name files so I can find them later I know how to double click so open a file	Computer Users	I can find, open, edit and save files I am working on.	

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I know the difference between save and save as		
I know my way around the user interfaces for google chrome, Microsoft Edge and Safari (iPads) I know how to phrase a search to finds what I want I know how to go through the list of results I know I have to check the website with an adult before going on it	Computer Users	I can use different software. I can navigate the internet (including simple searches).
I know the difference between left and right click I know what the difference between click and double click I know where the home row is on the keyboard	Computer Users	I can use a mouse and keyboard.
I know my instructions have to be really clear because the computer will only do what I tell it	Computer Programmers	I can write longer instructions (an algorithm) for my friends and a toy.
I know that I need to check each line of code to see where the problem is I know that bug means coding error.	Computer Programmers	I can fix bugs in a program
I know what data is I know how to take a tally	Computer Programmers	I can collect and display data I can put a picture on a word document I can resize a picture I can put a table on word
AUTUMN ASSESSMENT STATEMENTS	AUTUMN VOCABULARY	
<u>Online Safety</u> I can use technology respectfully I know where to go for help I can recognise how others use technology outside of school Computer User <ul style="list-style-type: none"> I can find, open, edit and save files I am working on I can organise digital content (recognise file types) I can use different software programs and discuss the benefits of their usage (I can navigate the internet to complete a simple search) Using mice and keyboards/Word Processing	Home Row Mouse Keyboard Left click Right click Drag Keyboard Screen Type	Information Personal Shut down Open Save Edit Folder File
AUTUMN IMPACT ARE % GD %		
Helpful resources and web links: Online Safety: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/759003/Education_for_a_connected_world_PDF.PDF CommonsenseEducation: https://www.commonsense.org/education/digital-citizenship/curriculum	Pupils Not Meeting Target	Actions to address...

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<p>Computer User typing: http://primarygamesarena.com/Play/Keyboard-2030 https://www.bbc.co.uk/bitesize/topics/zf2f9j6/articles/z3c6tfr https://www.todayparent.com/family/fun-typing-games-for-kids/</p> <p>PC: Word, powerpoint iPads: Photo Booth, Camera, iMovie, ChatterPix (to present what they've found) Using mice and keyboards/Word Processing: https://www.twinkl.co.uk/resource/tp-i-001-new-planit-computing-year-1-word-processing-skills-unit-pack</p>		
SPRING ASSESSMENT STATEMENTS	SPRING VOCABULARY	
<p><u>Computer Programmer</u></p> <ul style="list-style-type: none"> • I can use a range of instructions as part of longer algorithms • I can understand that programs run by following clear instructions • I understand algorithms are used on digital devices as programs <li style="padding-left: 20px;">I can predict the outcome of simple algorithms <li style="padding-left: 20px;">I can find and fix simple bugs in simple programs and algorithms 	<p>Algorithm Bugs Bug fixing</p>	
<p>Helpful resources and web links: Unplugged: https://csunplugged.org/en/topics/ Play lab iPads: LightBot Scratch online Bee Bots: https://www.twinkl.co.uk/resource/t-i-109-create-and-debug-programs-with-treasure-map-bee-bot-activity-pack PC: cogde.org (course A (2019 version): Lesson 5, 6, 7, 8, 9, 10) PC: ScratchJr online, code.org</p>	Pupils Not Meeting Target	Actions to address...
SPRING IMPACT ARE % GD %		
SUMMER ASSESSMENT STATEMENTS	SUMMER VOCABULARY	
<p><u>Computer Programmer</u></p>	<p>Same as Spring</p>	

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<ul style="list-style-type: none"> I can use a range of instructions as part of longer algorithms I can understand that programs run by following clear instructions I understand algorithms are used on digital devices as programs I can predict the outcome of simple algorithms I can find and fix simple bugs in simple programs and algorithms I can collect data and display it as information on the computer 	Data				
SUMMER IMPACT ARE % GD %					
Helpful resources and web links: https://www.twinkl.co.uk/resource/t-i-109-create-and-debug-programs-with-treasure-map-bee-bot-activity-pack Unplugged: https://csunplugged.org/en/topics/ Play lab iPads: LightBot Scratch online Bee Bots: https://www.twinkl.co.uk/resource/t-i-109-create-and-debug-programs-with-treasure-map-bee-bot-activity-pack PC: cogde.org (course A (2019 version): Lesson 5, 6, 7, 8, 9, 10) PC: ScratchJr online, code.org	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; padding: 5px;">Pupils Not Meeting Target</th> <th style="width: 50%; padding: 5px;">Actions to address...</th> </tr> </thead> <tbody> <tr> <td style="height: 150px;"></td> <td style="height: 150px;"></td> </tr> </tbody> </table>	Pupils Not Meeting Target	Actions to address...		
Pupils Not Meeting Target	Actions to address...				

NATIONAL CURRICULUM
Key stage 2 (COVERED IN Y3, COVERED IN Y4, COVERED IN Y5, COVERED IN Y6)
Pupils should be taught to: <ul style="list-style-type: none"> 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

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- 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
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Year 3

Intent

Knowledge (I know therefore...)	Strand	Skills (...I can)
<p>I know how to be a good digital citizen. I know ways private information can be protected. I know that what I put online can affect other people. I know what to do if someone is mean or bullying me online. I know that everything I see online might not be true.</p>	Online Safety	I can use technology safely and respectfully.
<p>I know what the software I use is for. I know what the key buttons I need look like for each programme I use buttons. I know how to undo my last action or fix a mistake in all the programmes I use.</p>	Computer Users	I can use a range of software.
<p>I know that computer networks are made of computers, servers and routers. I know that servers store shared information. I know servers follow different rules for different people. I know that servers recognise people by their usernames. I know some information is only stored on the computer I'm using. I know the information on websites is stored on a server that hosts the website. I know I can search other people's servers by using a search engine such as google. I know that the way I phrase my search term can change how effective it is. I know I can search my local server by using the search facility on windows explorer I know I can search my computer's files by using the search facility on windows explorer. I know I can search a document or web page for a key word by using ctrl+f</p>	Computer Users	I can search for info in different ways (internet/key words using the ctrl+f)
<p>I know how to create a new PowerPoint. I know how to type on a slide. I know there are different types of slide. I know how to add a new slide. I know how to make custom transitions between slides.</p>	Computer Users	I can present information using PowerPoint

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<p>I know I can animate the elements on the slide. I know that information can be presented effectively without a computer or PowerPoint. I know when technology adds little or no value.</p>		
<p>I know that an input is a way of giving a computer information it can use. (Example pressing an arrow key or shaking the device) I know different types of input. I know that an output is what a computer does with the information I have given it. (Example: changing direction, changing colour or making a sound) I know different types of output.</p>	Computer Programmers	I can use different forms of input and output.
<p>I know that I have to plan what I want the algorithm to achieve (output) I know I need to plan what the inputs are for the algorithm I know my algorithm needs to be very precise and clear. I know I can follow the algorithm step-by-step to bug fix I know a range of directional terms I know what the blocks look like that I will need if I'm using Spheros or Scratch</p>	Computer Programmers	I can produce a simple program that completes a given task or specific goal
<p>I know ways to collect data I know what a branching database is. I know what kind of data will work with a branching database I know what kind of questions will make a branching database work.</p>	Computer Programmers	I can make a branching database
AUTUMN ASSESSMENT STATEMENTS	AUTUMN VOCABULARY	
<p><u>Online Safety</u> I know how to be a good digital citizen. I know ways private information can be protected. I know that what I put online can affect other people. I know what to do if someone is mean or bullying me online. I know that everything I see online might not be true.</p> <p><u>Computer User</u> I know what the software I use is for. I know what the key buttons I need look like for each programme I use. I know how to undo my last action or fix a mistake in all the programmes I use.</p>	<p>Griefing Software Personal information Private information Input Output</p>	
AUTUMN IMPACT ARE % GD %		
<p>Helpful resources and web links: Online Safety</p>	Pupils Not Meeting Target	Actions to address...

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https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/759003/Education_for_a_connected_world_PDF.PDF

CommonsenseEducation: <https://www.commonsense.org/education/digital-citizenship/curriculum>

Create images on:

paint

code.org

Scratch

Turtle

Brushes

On paper

Identify the input and output for each one.

SPRING ASSESSMENT STATEMENTS

I can search for info in different ways (internet/key words using the ctrl+f)

I know that computer **networks** are made of computers, **servers** and **routers**.

I know that servers store shared information.

I know servers follow different rules for different people.

I know that servers recognise people by their **usernames**.

I know some information is only stored on the computer I'm using.

I know the information on websites is stored on a server that **hosts** the website.

I know I can search other people's servers by using a **search engine** such as google.

I know that the way I phrase my **search term** can change how effective it is.

I know I can search my **local server** by using the search facility on **windows explorer**

I know I can search my computer's files by using the search facility on windows explorer.

I know I can search a document or web page for a key word by using **ctrl+f**

I can present information using PowerPoint

I know how to create a new PowerPoint.

I know how to type on a **slide**.

I know there are different types of slide.

I know how to add a new slide.

I know how to make custom **transitions** between slides.

I know I can **animate** the **elements** on the slide.

I know that information can be presented effectively without a computer or PowerPoint.

I know when technology adds little or no value.

SPRING VOCABULARY

Ctrl (Control)

networks

servers

routers

usernames

hosts

search engine

search term

local server

windows explorer

ctrl+f

slide

transitions

animate

elements

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	Pupils Not Meeting Target	Actions to address...
SPRING IMPACT ARE % GD %		
SUMMER ASSESSMENT STATEMENTS	SUMMER VOCABULARY	
<p>I can use different forms of input and output. I know that an input is a way of giving a computer information it can use. (Example pressing an arrow key or shaking the device) I know different types of input. I know that an output is what a computer does with the information I have given it. (Example: changing direction, changing colour or making a sound) I know different types of output.</p> <p>I can produce a simple program that completes a given task or specific goal I know that I have to plan what I want the algorithm to achieve (output) I know I need to plan what the inputs are for the algorithm I know my algorithm needs to be very precise and clear. I know I can follow the algorithm step-by-step to bug fix I know a range of directional terms I know what the blocks look like that I will need if I'm using Spheros or Scratch</p> <p>I can make a branching database I know ways to collect data I know what a branching database is. I know what kind of data will work with a branching database I know what kind of questions will make a branching database work.</p>	<p>Up, Down, Left, Right, Forwards, Backwards, Clockwise, Anticlockwise, Turn Right, Turn Left, 90 degrees</p> <p>Input, Output, Branching Database, Database</p>	
SUMMER IMPACT ARE % GD %		
<p>Helpful resources and web links: Sequencing lessons on: https://code.org/curriculum/unplugged</p>	Pupils Not Meeting Target	Actions to address...

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Code.org course B Scratch online

Soundation

iPads: Lightbot

ALEX

<https://www.j2e.com/j2data/>

[Animals Branching Database Activity Pack \(teacher made\) \(twinkl.co.uk\)](https://www.twinkl.co.uk)

[Planets Branching Database Activity Pack \(teacher made\) \(twinkl.co.uk\)](https://www.twinkl.co.uk)

[17 Top Branching Databases Teaching Resources \(twinkl.co.uk\)](https://www.twinkl.co.uk)

Year 4

Implementation

Knowledge (I know therefore...)	Strand	Skills (...I can)
<p>I know how to make healthy media choices.</p> <p>I know what personal and private information is and appropriate ways to share personal info such as hobbies I like.</p> <p>I know that what I put online can affect others.</p> <p>I know how to enable others to enjoy tech.</p> <p>I know what cyberbullying is and what to do about it.</p> <p>I know what rights and responsibilities I have when I make digital content.</p>	Online Safety	I can behave in an acceptable and responsible way when using technology.
<p>I know where the home row, top row and bottom row are</p> <p>I know that I use my right hand for the right hand side of the keyboard</p> <p>I know that I use my left hand for the left hand side of the keyboard</p> <p>I know which fingers to use for each button on the keyboard</p>	Computer Users	I can type more efficiently
<p>I know how to make a new document</p> <p>I know I need to find and save or copy a picture before I insert it to the document,</p> <p>I know to right click and paste pictures I have copied</p> <p>I know to insert and navigate to the pictures I have saved</p> <p>I know how to underline text</p> <p>I know how to make text bold or italic</p> <p>I know how to change the size and style of the font.</p> <p>I know to press ctrl+z to undo a mistake.</p>	Computer Users	I can use Microsoft Word or another word processor.
<p>I know what a range of software does.</p> <p>I know what I want to achieve so I can justify my choice of software.</p>	Computer Users	I can choose software to complete a task based on what that software does.
<p>I know that a repeat loop will repeat the commands inside it for the given number of times</p> <p>I know a forever loop will repeat the commands inside it until I manually stop the programme.</p>	Computer Programmers	I can use different loops in my algorithms

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I know a nested loop is a loop inside a loop.		
I know that a condition is the same as a decision. I know that computers are binary and the answers to the decisions can only be true or false I know that a condition uses the word 'if' to start the decision. I know that an algorithm containing an 'if condition' will only make that decision once, unless it's in a repeat loop.	Computer Programmers	I can use 'if' conditions.
I know exactly what I want my algorithm to achieve. I know I have to read my algorithm step-by-step (methodically) and compare what each step does to what I want it to do. I know working in a pair is more effective for bug fixing , because it's easier to see errors in others' work.	Computer Programmers	I can check my work for errors and fix them
AUTUMN ASSESSMENT STATEMENTS	AUTUMN VOCABULARY	
<p>Online Safety I can behave in an acceptable and responsible way when using technology. I know how to make healthy media choices. I know what personal and private information is and appropriate ways to share personal info such as hobbies I like. I know that what I put online can affect others. I know how to enable others to enjoy tech. I know what cyberbullying is and what to do about it. I know what rights and responsibilities I have when I make digital content.</p> <p>Computer Users I select software to accomplish given goals Typing/Word Processing I can collect and present data (Data Loggers on the wish-list!)</p>	<p>Data Griefing Cyberbullying Word Processor</p>	
AUTUMN IMPACT ARE % GD %		
<p>Helpful resources and web links: Online Safety https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/759003/Education_for_a_connected_world_PDF.PDF</p> <p>CommonsenseEducation: https://www.commonsense.org/education/digital-citizenship/curriculum</p>	Pupils Not Meeting Target	Actions to address...

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<p>Word Processing: https://www.twinkl.co.uk/resource/t2-i-146-computing-word-processing-year-4-unit-pack Typing: https://www.bbc.co.uk/bitesize/topics/zf2f9j6/articles/z3c6tfr</p>		
SPRING ASSESSMENT STATEMENTS	SPRING VOCABULARY	
<p><u>Computer Programmer</u> I can give an on-screen robot specific instructions that take them from A to B (Using Loops) I experiment with conditions (if) (Unplugged)</p>	<p>Repeat loop Forever loop If conditions Efficient coding Debug</p>	
Helpful resources and web links:	Pupils Not Meeting Target	Actions to address...
<p>Soundation Scratch Code.org Lightbot Level 2 I experiment with conditions (if) (Unplugged)</p> <p>https://minecraft.makecode.com/courses/csintro/conditionals/unplugged</p> <p>https://makecode.microbit.org/courses/csintro/conditionals/unplugged</p> <p>https://csedweek.org/files/ConditionalsHoC.pdf</p>		
SPRING IMPACT ARE % GD %		
SUMMER ASSESSMENT STATEMENTS	SUMMER VOCABULARY	
<p><u>Computer Programmer</u> I experiment with conditions to control models I can debug I can break programs up into smaller parts</p>	<p>Same as Spring</p>	

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I can use a range of programs to complete a task I can use other programs as I code					
SUMMER IMPACT ARE % GD %					
Helpful resources and web links: Code.org Course D:Lesson 11 OR https://studio.code.org/s/deepdive-debugging/stage/1/puzzle/1?section_id=2158652 Scratch Dragon's Den challenge Use scratch or code.org to create a game that could be presented using PowerPoint or whatever the children think would work best.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%; padding: 5px;">Pupils Not Meeting Target</th> <th style="width: 50%; padding: 5px;">Actions to address...</th> </tr> <tr> <td style="height: 150px;"></td> <td></td> </tr> </table>	Pupils Not Meeting Target	Actions to address...		
Pupils Not Meeting Target	Actions to address...				

Year 5

Implementation

Knowledge (I know therefore...)	Strand	Skills (...I can)
I know the age rating and possible issues associated with the programs I use. I know ways to have healthy balance of time on and off technology. I know that what I share online is available to others. I know what clickbait is and ignore it. I know ways to have healthy balance of time on and off technology	Online Safety	I can make healthy choice about the media I use.
I know that things like gender and other stereotypes can be reinforced online. I know what is appropriate and inappropriate when forming friendships online. I know that the way I treat others online can affect them the same as it could in person. I know that what I share online can give an impression of who I am. I know who to tell if I'm worried about something I see online.	Online Safety	I can be safe and respectful online.
I know what a range of software does. I know what I want to achieve so I can justify my choice of software. I know that I might need to use more than one piece of software to achieve my goal.	Computer Users	I can use a range of software to accomplish given goals
I know that an ' if condition ' is a single true or false decision E.g. If it's 7am, switch on the alarm. I know that a ' while condition ' will repeat commands as long as that condition is true.	Computer Programmers	I can use a range of conditionals

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<p>E.g. While there are still sweets in front of me, I will eat sweets. I know that an 'until condition' will stop repeating a string of commands when a defined condition becomes true. E.g. Until the score reaches 10, we will continue playing the game.</p>		
<p>I know what I want the algorithm/programme to achieve. I know which condition I need I know how to use repeat loops and which ones I need I know a range of commands from previous years I know which event I need to start the programme I know that, if it doesn't do what I want it to do, I will need to bug fix</p>	<p>Computer Programmers</p>	<p>I can combine sequences, instructions and procedures to accomplish specific goals</p>
<p>I know that I need to remember the name/code for my Sphero I know that the Sphero needs to be connected to my iPad I know what the sphero looks like when it is connected to my laptop I know how to start a new project on the Sphero EDU app I know how to make the sphero change colour I know how to make the she sphero play a sound I know how to make the sphero move</p>	<p>Computer Programmers</p>	<p>I can control external hardware from within my programs</p>
AUTUMN ASSESSMENT STATEMENTS		AUTUMN VOCABULARY
<p>Online Safety I can make healthy choice about the media I use. I know the age rating and possible issues associated with the programs I use. I know ways to have healthy balance of time on and off technology. I know that what I share online is available to others. I know what clickbait is and ignore it. I know ways to have healthy balance of time on and off technology</p> <p>I can be safe and respectful online. I know that things like gender and other stereotypes can be reinforced online. I know what is appropriate and inappropriate when forming friendships online. I know that the way I treat others online can affect them the same as it could in person. I know that what I share online can give an impression of who I am. I know who to tell if I'm worried about something I see online.</p>		<p>Clickbait</p>
AUTUMN IMPACT ARE % GD %		
<p>Helpful resources and web links: Online Safety</p>	Pupils Not Meeting Target	Actions to address...

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<p>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/759003/Education_for_a_connected_world_PDF.PDF</p> <p>CommonsenseEducation: https://www.commonsense.org/education/digital-citizenship/curriculum</p>		
SPRING ASSESSMENT STATEMENTS	SPRING VOCABULARY	
<p><u>Computer Users</u> I can use a range of software to accomplish given goals I know what a range of software does, including Sketchup and Publisher I know what I want to achieve so I can justify my choice of software. I know that I might need to use more than one piece of software to achieve my goal.</p> <p><u>Computer Programmers</u> I can use a range of conditionals I know that an 'if condition' is a single true or false decision E.g. If it's 7am, switch on the alarm. I know that a 'while condition' will repeat commands as long as that condition is true. E.g. While there are still sweets in front of me, I will eat sweets. I know that an 'until condition' will stop repeating a string of commands when a defined condition becomes true. E.g. Until the score reaches 10, we will continue playing the game.</p>	<p>Software names Conditions Loops</p>	
<p>Helpful resources and web links: Computer User Sketchup Publisher Computer Programmer Code.org (Farmer) Course 3:Lesson 12 Scratch online Robot Mesh</p>	Pupils Not Meeting Target	Actions to address...

Springvale Primary School Computing Curriculum Intent

SPRING IMPACT ARE % GD %

SUMMER ASSESSMENT STATEMENTS

SUMMER VOCABULARY

Computer Programmers

I can combine sequences, instructions and procedures to accomplish specific goals

- I know what I want the algorithm/programme to achieve.
- I know which condition I need
- I know how to use **repeat loops** and which ones I need
- I know a range of commands from previous years
- I know which **event** I need to start the programme
- I know that, if it doesn't do what I want it to do, I will need to **bug fix**

I can control external hardware from within my programs

- I know that I need to remember the name/code for my **Sphero**
- I know that the Sphero needs to be connected to my iPad
- I know what the sphero looks like when it is connected to my laptop
- I know how to start a new project on the Sphero EDU app
- I know how to make the sphero change colour
- I know how to make the she sphero play a sound
- I know how to make the sphero move
- I know how to use different conditionals

All previous vocab!

SUMMER IMPACT ARE % GD %

Helpful resources and web links:

Twinkl: <https://www.twinkl.co.uk/resource/tp2-i-224-planit-computing-year-5-using-and-applying-skills-lesson-pack>

- Sphero Robots:
- Burglar alarm
- Strength test
- Sleepy Baby!

Pupils Not Meeting Target

Actions to address...

Year 6

Implementation

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Knowledge (I know therefore...)	Strand	Skills (...I can)
<p>I know what phishing is and how to avoid it</p> <p>I know how what I put online paints an image of me and who I am (Selfie safety – Tik-tok tips)</p> <p>I know what is safe to tell others and what isn't</p> <p>I know what 'digital drama' and how to de-escalate and avoid it.</p> <p>I know I need to evaluate information online and decide if it's credible or not.</p>	Online Safety	I can be safe and respectful online
<p>I know what formula, columns and rows are</p> <p>I know that * is the same as x</p> <p>I know that / is the same as divide</p> <p>I know I start a formula with =</p> <p>I know that some formula need brackets to identify values and cells</p> <p>I know that =SUM() is used for adding values</p> <p>I know I can change the height and width of cells, rows and columns</p> <p>I know I can use data in the spreadsheet for a bar graph by selecting it</p> <p>I know that =AVERAGE() is the formula to calculate the mean average of multiple cells</p> <p>I know I can link cells that have formula (E.g. a few cells could contain the sum of values and another cell could have the average of all those sums)</p>	Computer Programmers	I can use spreadsheets
<p>I know that a variable is normally a numerical value that holds a place in a formula of algorithm but could be different every time</p> <p>I know a variable needs to be set before it is used</p> <p>I know my variable needs to be given a clear name so others know what it stands for</p> <p>I know what a range of variables are (passwords, sensor values, scores, timers)</p>	Computer Programmers	I can use variables
<p>I know what a range of software on a range of digital devices does</p> <p>I know I need to break a problem down into different parts that suit different programmes.</p> <p>I know which programmes I could use for each part of the challenge</p> <p>I know where it may be more effective and/or efficient to not use technology</p> <p>I know different solutions can exist for the same problem</p>	Computer Programmers/ Computer Programmers	I can select, use and combine software on a range of digital devices to solve real-life problems
AUTUMN ASSESSMENT STATEMENTS		AUTUMN VOCABULARY
<p>Online Safety</p> <p>I know what phishing is and how to avoid it</p> <p>I know how what I put online paints an image of me and who I am (Selfie safety – Tik-tok tips)</p> <p>I know what is safe to tell others and what isn't</p>		<p>Phishing Domain</p> <p>Formula</p>

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<p>I know what 'digital drama' and how to de-escalate and avoid it. I know I need to evaluate information online and decide if it's credible or not.</p> <p>Computer Users I can use spreadsheets I know what formula, columns and rows are I know that * is the same as x I know that / is the same as divide I know I start a formula with = I know that some formula need brackets to identify values and cells I know that =SUM() is used for adding values I know I can change the height and width of cells, rows and columns I know I can use data in the spreadsheet for a bar graph by selecting it I know that =AVERAGE() is the formula to calculate the mean average of multiple cells I know I can link cells that have formula (E.g. a few cells could contain the sum of values and another cell could have the average of all those sums)</p>	<p>Columns Rows = *Instead of x / Instead of divide</p>				
AUTUMN IMPACT ARE % GD %					
<p>Helpful resources and web links: Online Safety https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/759003/Education_for_a_connected_world_PDF.PDF</p> <p>CommonsenseEducation: https://www.commonsense.org/education/digital-citizenship/curriculum</p> <p>Computer Users Twinkl: https://www.twinkl.co.uk/resource/tp2-i-041-new-planit-computing-year-6-spreadsheets-unit-pack</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; padding: 5px;">Pupils Not Meeting Target</th> <th style="width: 50%; padding: 5px;">Actions to address...</th> </tr> </thead> <tbody> <tr> <td style="height: 100px;"></td> <td style="height: 100px;"></td> </tr> </tbody> </table>	Pupils Not Meeting Target	Actions to address...		
Pupils Not Meeting Target	Actions to address...				
SPRING ASSESSMENT STATEMENTS	SPRING VOCABULARY				
<p>Computer Programmer I can use variables I know that a variable is normally a numerical value that holds a place in a formula of algorithm but could be different every time I know a variable needs to be set before it is used I know my variable needs to be given a clear name so others know what it stands for I know what a range of variables are (passwords, sensor values, scores, timers)</p>	<p>Error</p>				

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I know how to make a variable on Scratch and Sphero EDU		
<p>Helpful resources and web links: Scratch Secret number game: https://scratch.mit.edu/projects/306216451/</p> <p>Kodu https://www.twinkl.co.uk/resource/tp2-i-139-new-planit-computing-year-6-kodu-programming-unit-pack</p> <p>Sphero Magic 8 ball Colour game (This is really hard!) Random Tig Slap the fly</p>	<p>Pupils Not Meeting Target</p>	<p>Actions to address...</p>
SPRING IMPACT ARE % GD %		
SUMMER ASSESSMENT STATEMENTS	SUMMER VOCABULARY	
<p><u>Computer Programmer</u> I can select, use and combine software on a range of digital devices to solve real-life problems I know what a range of software on a range of digital devices does I know I need to break a problem down into different parts that suit different programmes. I know which programmes I could use for each part of the challenge I know where it may be more effective and/or efficient to not use technology I know different solutions can exist for the same problem</p>		
SUMMER IMPACT ARE % GD %		
<p>Helpful resources and web links: https://www.twinkl.co.uk/resource/tp2-i-223-planit-computing-year-6-using-and-applying-skills-lesson-pack</p>	<p>Pupils Not Meeting Target</p>	<p>Actions to address...</p>