



Computing Knowledge and Skills Progression Map

Computing programme of study: National Curriculum Aims

The National Curriculum for Computing aims to ensure that all children:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- be responsible, competent, confident and creative users of information and communication technology.

Computing programme of study: **Knowledge and understanding of computer science**

National Curriculum: All pupils will know how to apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation. In addition, all pupils will know how to analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems. They will be able to evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems and be responsible, competent, confident and creative users of information and communication technology.

Multimedia Text and Images

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Skills	I can add text strings, text boxes and show and hide objects and images, manipulating the features	I can add text strings, text boxes and show and hide objects and images, manipulating the features	I can create different effects with different technological tools, demonstrating control and use appropriate keyboard commands to amend text on a device	I can create different effects with different technological tools, demonstrating control and use appropriate keyboard commands to amend text on a device	I can use the skills already developed to create content using unfamiliar technology	I can use the skills already developed to create content using unfamiliar technology

Knowledge	I know how to contribute to a whole class digital resource that includes text, graphics and sound	I know how to generate my own multimedia work, with help, adding text and images to a template document using an image and word bank	I know how to create and begin to edit presentation documents and text, experimenting with fonts, size, colour, alignment for emphasis & effect	I know with increasing confidence and accuracy how to use a keyboard effectively, including the use of keyboard shortcuts	I know how to select an appropriate ICT or online tool to create and share ideas	I know how to collect information and media from a range of sources (considering copyright issues) into a presentation for a specific audience
Skills	I can use various tools, such as brushes, pens, eraser, stamps and shapes, and set the size, colour and shape	I can use various tools, such as brushes, pens, eraser, stamps and shapes, and set the size, colour and shape	I can use applications and devices in order to communicate ideas, work, and messages	I can use applications and devices in order to communicate ideas, work, and messages	I can select, use and combine the appropriate technology tools to create effect	I can select, use and combine the appropriate technology tools to create effect

Knowledge	I am beginning to know how to use brushes, pens, rubber, stamps and shapes when using paint programs to create a picture	I know how to use an increasing variety of tools and effects in paint programs and talk about my choices	I know how to explore and begin to evaluate the use of multimedia to enhance communication	I know how to explore and evaluate the use of multimedia to enhance communication and appeal to different audiences	I know how to use a wide range of effects in art programs and online tools, discussing the choices made and their effectiveness	I know how to use sound, images, text, transitions, hyperlinks and HTML code effectively in presentations
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Skills	I can use key vocabulary to demonstrate knowledge and understanding in this strand: paint, colour, brush, tools, settings, undo, redo, text, image, size, poster, launch, application, software, window, minimise, restore, size, move, screen, close, click, drag, log on, log off, keyboards, keys, mouse, click, button, double click, drag, present	I can use applications and devices in order to communicate ideas, work, messages and demonstrate control	I can save, retrieve and evaluate work, making amendments	I can save, retrieve and evaluate work, making amendments	I can review and improve my own work and support others to improve their work	I can review and improve my own work and support others to improve their work
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Knowledge	I know what brush, paint, colour, tools, size, image, drag, mouse, click, keys and button means	I know how to create my own documents, adding text and images and use a keyboard with increasing confidence	I know how to amend text by highlighting and using SELECT/ DELETE and COPY/ PASTE and save changes made	I know how to use and change font sizes and effects such as bullet points appropriately and save changes made I know how to use spell check to improve the accuracy of my work	I know how to review my own, and a friend's work and provide feedback that is constructive and specific.	I know how to evaluate the effectiveness of my own work and the work of others and provide constructive feedback
Skills	I can save, retrieve and organise work	I can save, retrieve and organise work	I can insert a picture/text/graph/hyperlink from the internet or a personal file	I can insert a picture/text/graph/ hyperlink from the internet or a personal file	I can save, retrieve and evaluate my work, making amendments	I can save, retrieve and evaluate my work, making amendments

Knowledge	With support, I know how to save, retrieve and print work	I know when and how to use the RETURN/ ENTER key and use SHIFT & CAPS LOCK to enter capital letters. I know how to use DELETE & BACKSPACE buttons to correct text and create sentences, SAVE & edit later.	I am beginning to know how to improve my work by adding picture/text/graph / hyperlink to improve effectiveness	I am becoming confident in knowing how to improve my work by inserting and modifying a picture/text/graph/ hyperlink to improve effectiveness	I am confident in knowing how to improve my work by inserting and modifying a picture/text/graph/ hyperlink to improve effectiveness and save changes made	With a greater degree of accuracy and complexity, I know how to improve my work by inserting and modifying a picture/text/graph/ hyperlink to improve effectiveness and save changes made
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Skills

I can use key vocabulary to demonstrate knowledge and understanding in this strand: paint, colour, brush, tools, settings, undo, redo, text, image, size, poster, launch, application, software, window, minimise, restore, size, move, screen, close, click, drag, log on, log off, keyboards, keys, mouse, click, button,

I can use key vocabulary to demonstrate knowledge and understanding in this strand building on prior knowledge by adding: draw, object, shape, line, line colour, fill colour, group, ungroup, font, size, text box, format, image, wrap text, plan, link, image, object, link, hyperlink, minimise, restore, size, move, screen, split, create, organise, file, folder, close, exit, search, print, password, screenshot, snipping tool,

I can use key vocabulary to demonstrate knowledge and understanding in this strand building on prior knowledge by adding: draw, object, shape, line, line colour, fill colour, group, ungroup, font, size, text box, format, image, wrap text, plan, link, image, object, link, hyperlink, minimise, restore, size, move, screen, split, create, organise, file, folder, close, exit, search, print, password, screenshot, snipping tool, shift, undo, redo, menu,

I can insert a picture/text/graph/ hyperlink from the internet or personal file

I can insert a picture/text/graph/ hyperlink from the internet or personal file

		double click, drag, present	shift, undo, redo, menu, dictionary, highlight, cursor, toolbar, spellcheck.	dictionary, highlight, cursor, toolbar, spellcheck.		
Knowledge		I know what software, double click, window, minimise, restore, move and close mean	I know what create, organise, folder, search, password, screenshot, snipping tool, shift, undo, redo, toolbar and highlight mean	I know what spellcheck, password, menu, line, line colour, fill colour, group, ungroup and text box mean	I know how to insert a picture/text/graph/ hyperlink from a variety of sources to enhance the structure of presentations	With a greater degree of confidence and complexity, I know how to insert a picture/text/graph/ hyperlink from a variety of sources to enhance the structure of presentations

Skills					I can use key vocabulary to demonstrate knowledge and understanding in this strand building on prior knowledge by adding: window, layout, text, font, colour, format, heading, hyperlink, 2D shape, 3D shape, orbit, pan, zoom, eraser, dimension, measurement, guide	I can use key vocabulary to demonstrate knowledge and understanding in this strand building on prior knowledge by adding: window, layout, text, font, colour, format, heading, hyperlink, 2D shape, 3D shape, orbit, pan, zoom, eraser, dimension, measurement, guide
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Knowledge					I am beginning to know what heading, hyperlink, 2D shape, 3D shape, orbit, pan, zoom, eraser, dimension, measurement, guide means	I know what heading, hyperlink, 2D shape, 3D shape, orbit, pan, zoom, eraser, dimension, measurement, guide means
Multimedia, Sound and Motion						
Skills	I can use software to record sounds	I can use software to record sounds	I can use software to record, create and edit sounds and capture still images	I can use software to record, create and edit sounds and capture still images	I can collect audio from a variety of resources including own recordings and internet clips	I can collect audio from a variety of resources including own recordings and internet clips

Knowledge	I know, with support, how to use a sound recorder to record my own voice and play it back to the class	I know how to explore the effects of sound and music in animation and video	I know how to use ICT tools to create musical phrases	I know how to use art programs and online tools to modify photos and musical phrases for a specific purpose using a range of effects	I know how to use online tools to download audio and internet clips to use within a presentation	I know how to collect information and media from a range of sources (considering copyright issues) into a presentation for a specific audience
Skills	I can change sounds recorded	I can change sounds recorded	I can change recorded sounds, volume, duration and pauses	I can change recorded sounds, volume, duration and pauses	I can use a digital device to record sounds and present audio	I can use a digital device to record sounds and present audio
Knowledge	I know, with support, how to change the sounds I have recorded	With increasing confidence, I know how to make simple changes to the sounds I have recorded	I know how to amend musical phrases I have created using ICT tools	I know how to use ICT tools to create and modify music phrases for a specific purpose	I know how to select an appropriate ICT or online tool to create and share ideas.	I know how to identify the purpose for selecting an appropriate online tool

Skills	I can save, retrieve and organise work	I can save, retrieve and organise work	I can use software to capture video for a purpose	I can use software to capture video for a purpose	I can trim, arrange and edit audio levels to improve quality	I can trim, arrange and edit audio levels to improve quality
Knowledge	I am beginning to know how to use a keyboard to save and find work	I know how to use a keyboard with increasing confidence to save and find work	I am beginning to know how to explore the use of video, animation & green screening	I know, with a good degree of confidence, how to create and modify clips to achieve a specific purpose	I am beginning to know how to use audio editing tools such as Audacity to edit a piece of audio and improve its quality	I know how to make more complex changes to a piece of audio using an audio editing tool such as Audacity
Skills	I can use key vocabulary to demonstrate knowledge and understanding in this strand: commands, add sound	I can use key vocabulary to demonstrate knowledge and understanding in this strand: commands, add sound	I can crop and arrange clips to create a short film	I can crop and arrange clips to create a short film	I can publish my animation and use a movie editing package to edit/refine and add titles	I can publish my animation and use a movie editing package to edit/refine and add titles

Knowledge	I know and recognise what commands and sound mean in an ICT context	I know when and how to use the RETURN/ ENTER key. I know how to use SHIFT and CAPS LOCK to enter capital letters. I know how to use the DELETE & BACKSPACE buttons to correct text. I know how to create simple sentences, SAVE and edit later.	I am beginning to know how to record, crop and arrange clip using such ICT tools as iMovie	I know how to explore the use of video, animation, & green screening to create a short film for a specific audience	I am beginning to know how to explore the effects of multimedia (photos, video, and sound) in a presentation or video and show how they can be modified and publish.	I know how to create and edit my animations and publish with a higher degree of complexity
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Skills			I can plan an animation and move items within each animation for playback	I can plan an animation and move items within each animation for playback	I can use key vocabulary to demonstrate knowledge and understanding in this strand: audio, record, edit, play stop, skip, waveform, input, output, record, edit, play podcast, digital content, downloadable, backing track, voiceover, mute, gain, production, post-production, documentary, project, evaluation, screening, ceremony, upload	I can use key vocabulary to demonstrate knowledge and understanding in this strand: audio, record, edit, play stop, skip, waveform, input, output, record, edit, play podcast, digital content, downloadable, backing track, voiceover, mute, gain, production, post-production, documentary, project, evaluation, screening, ceremony, upload
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Knowledge			I am beginning to know how to create and edit an animation, experimenting with playback for emphasis and effect.	I know how to manipulate and modify an animation I have created for playback purposes	I know what podcast, backing track, downloadable, documentary and project mean	I know what production, post-production, evaluation, screening, ceremony and upload mean
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Skills			<p>I can use key vocabulary to demonstrate knowledge and understanding in this strand: audio, sound, video, movie, embed, link, file format, animate, animation, still image, thaumatrope, zoetrope, zoopraxiscope, stereoscope, flip book, frame, onion skinning, loop, frame rate, record, stop, play, stop motion, stop frame.</p>	<p>I can use key vocabulary to demonstrate knowledge and understanding in this strand: audio, sound, video, movie, embed, link, file format, animate, animation, still image, thaumatrope, zoetrope, zoopraxiscope, stereoscope, flip book, frame, onion skinning, loop, frame rate, record, stop, play, stop motion, stop frame</p>		
Knowledge			<p>I know the meaning of audio, sound, record, link, frame and animation</p>	<p>I know the meaning of format, onion skinning, stop, play, stop motion and stop frame</p>		

Handling Data

Skills			I can talk about the different ways data can be organised	I can talk about the different ways data can be organised	I can construct data on the most appropriate application	I can construct data on the most appropriate application
Knowledge			I know how to interpret data presented in different ways from pre-prepared databases	I know how to plan and create a database to organise data in different ways	I know how to collect and record data and present the information using a spreadsheet or database	I know how to use the whole data process – generate, process, interpret, store, and present information – realising the need for accuracy and checking plausibility.
Skills			I can sort and organise information to use in other ways	I can sort and organise information to use in other ways	I can use keyboard shortcuts and functions to input data on spreadsheets and create formulas for spreadsheets	I can use keyboard shortcuts and functions to input data on spreadsheets and create formulas for spreadsheets

Knowledge			I know how to use connections with Maths to organise/sort information into graphs for example on the Topmarks website and Google Docs	I know how to identify different types of data	I know how to begin to use more complex search techniques such as and/or; \leq / \geq to return results	I know how to interrogate a database, refining searches to provide answers to questions.
Skills			I can search a ready-made database to answer questions	I can search a ready-made database to answer questions	I can interpret data, including spotting inaccurate data and comparing data	I can add data to an existing database
Knowledge			I know how to use a branch database to sort information in different ways to represent the answers to a variety of questions	I am beginning to know how to ask questions carrying out simple searches on a pre-prepared database	I am beginning to know how to identify poor quality data and solve problems and present answers using data tools	I know how to accurately enrich data within an existing database to return higher quality results

Skills			I can use key vocabulary to demonstrate knowledge and understanding in this strand: Google Docs, insert table	I can use key vocabulary to demonstrate knowledge and understanding in this strand: Google Docs, insert table	I can use key vocabulary to demonstrate knowledge and understanding in this strand: Google Docs, insert, table, spreadsheet, cell, row, column, formula/formulas, calculate, format, edit, insert, ascending, descending	I can use key vocabulary to demonstrate knowledge and understanding in this strand: Google Docs, insert, table, spreadsheet, cell, row, column, formula/formulas, calculate, format, edit, insert, ascending, descending
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Knowledge			I am beginning to know what google docs is and understand that information can be represented in different ways when inserted into a table/graph	I am becoming more confident in knowing what google docs is and understand that information can be represented in different ways when inserted into a table/graph	I am becoming more confident with knowing spreadsheet terminology to include the meaning of formulas, ascending and descending	With confidence, I know what calculate, edit and format mean
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Technology in Our Lives

Skills	I can recognise ways that technology is used in the home and community, e.g. taking photos, blogs, shopping	I can recognise ways that technology is used in the home and community, e.g. taking photos, blogs, shopping	I can explain ways to communicate with others online	I can explain ways to communicate with others online	I can search for information using appropriate websites and advanced search functions within Google	I can search for information using appropriate websites and advanced search functions within Google
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Knowledge	I know how to play games on a tablet, take photographs and understand how mobile phones are used to stay in touch with people we care about	I know how to play games on a tablet, take photographs and understand how mobile phones are used to stay in touch with people we care about	I know how to use tools to communicate with others online such as email	I know what social media is and how it can be used to help me keep in touch with people online	I know what effective strategies to use to return appropriate results when using a search engine to find information online such as framing questions	I know how to use Google to conduct advanced searches as part of a research project
Skills	I can use links to websites to find information	I can use links to websites to find information	I can describe the world wide web as the part of the internet that contains websites	I can describe the world wide web as the part of the internet that contains websites	I can use strategies to check the reliability of information (cross-check with another source such as books)	I can use strategies to check the reliability of information (cross-check with another source such as books)

Knowledge	I know how to use the internet to play and learn	I know how to use the internet to play and learn and begin to understand that I can find information from different places on the internet	I know the purpose of the world wide web and understand that it contains websites that where I can play games or find information that helps with my learning	I know the purpose of the world wide web and understand that it contains websites and that those websites have owners that own the information on them	I am beginning to know that some sources of information online are better than others and more reliable. I can identify the owner of online information and cross check this against offline information	With increased confidence, I know that some sources of information online are better than others and more reliable. I can identify the owner of online information and cross check this against offline information
Skills	I can recognise age-appropriate websites	I can recognise age-appropriate websites	I can add websites to a favourites list	I can add websites to a favourites list	I can talk about the way search results are selected and ranked	I can talk about the way search results are selected and ranked

Knowledge	I know and recognise websites that help me to learn such as 'Numberblocks' and 'Teach your monsterto read'	I know and recognise websites that help me to learn such as Purple Mash	I know, with help, how to create a favourites list on the internet	With increasing confidence, I know how to create a favourites list on the internet	I am beginning to know that visitors/clicks on a page creates a footprint and that the number of subscribers to a page (on YouTube for example) can effect search results and how they are ranked on the page	With greater confidence, I know that visitors/clicks on a page creates a footprint and that the number of subscribers to a page (on YouTube for example) can effect search results and how they are ranked on the page
Skills	I can use safe search filters	I can use safe search filters	I can use search tools to find and use an appropriate website and content	I can use search tools to find and use an appropriate website and content	I can check the reliability of a website, including the photos on a website	I can check the reliability of a website, including the photos on a website

Knowledge	I know that I am safe searching on the internet if I use Kiddle, Kimages and Kpedia	I know that I am safe searching on the internet if I use Kiddle, Kimages and Kpedia	I know how to use simple search tools to find appropriate websites and content	I know how to use search tools to find appropriate websites and content and I am beginning to know how to consider the reliability of information and ways it may influence me	I am beginning to know that I need to check the date information was created to establish if it is current enough and find out the author of the information to determine if they are credible	With a greater degree of confidence, I know that I need to check the date information was created to establish if it is current enough and find out the author of the information to determine if they are credible
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Skills	I can use key vocabulary to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, internet, subject, address, communicate, sender, safe, secure	I can use key vocabulary to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, internet, subject, address, communicate, sender, safe, secure	I can use strategies to improve results when searching online	I can use strategies to improve results when searching online	I can tell you about copyright and acknowledge the sources of information	I can tell you about copyright and acknowledge the sources of information
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Knowledge	I know what google and search and internet mean when taking part in a whole class discussion	I know what a website address is and what 'staying safe' online means and that a 'search engine' helps me find information	I am beginning to know how to improve my internet search results through using keywords and phrases	With increased confidence, I know how to improve my internet search results through using keywords and phrases	I am starting to know that copyright is a form of protection given to the authors of information created and stored online	With a good degree of confidence, I know that copyright is a form of protection given to the authors of information created and stored online
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Skills			<p>I can use key vocabulary to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, subject, address, communicate, sender, safe, secure, internet, world wide web, social media</p>	<p>I can use key vocabulary to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, subject, address, communicate, sender, safe, secure, internet, world wide web, social media</p>	<p>I can use key vocabulary to demonstrate knowledge and understanding in this strand: world wide web, search, search engine, advanced search, results, Google, browser, terms of use, bias, authority, citation, plagiarism, source, website, secure, https, site, domain, website, browser, address bar</p>	<p>I can use key vocabulary to demonstrate knowledge and understanding in this strand: world wide web, search, search engine, advanced search, results, Google, browser, terms of use, bias, authority, citation, plagiarism, source, website, secure, https, site, domain, website, browser, address bar</p>
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Knowledge			I know what filtering means when I am searching online and what an email is and what it is used for	I know what social media and an image is	I know what plagiarism, copyright and an address bar mean	I know what domain, bias and source mean
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Coding and Programming

Skills	I can give commands one at a time to control direction and movement, including straight, forwards, backwards, turn	I can give commands one at a time to control direction and movement, including straight, forwards, backwards, turn	I can use logical thinking to solve an open-ended problem by breaking it up into smaller parts	I can use logical thinking to solve an open-ended problem by breaking it up into smaller parts	I can use external triggers and infinite loops to demonstrate control	I can use external triggers and infinite loops to demonstrate control
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Knowledge	I know how to press buttons on a floor robot and talk about the movements it makes	I know how to physically follow and give others forward, backward & turn instructions	I know how to solve open-ended problems when using a floor robot and Logo including creating simple regular polygons, making sounds and planning movements such as a dance	I know how to solve open-ended problems using a floor robot, Logo and other software using efficient procedures to create shapes and letters	I know how to explore instructions to control software or hardware with an input and using 'if' and 'then' commands	I know how to create a condition-controlled loop to add a high degree of intelligence to a program
Skills	I can give a set of instructions to follow and predict what will happen	I can control the nature of events: repeat, loops, single events and add and delete features	I can write a program, putting commands into a sequence to achieve a specific outcome	I can write a program, putting commands into a sequence to achieve a specific outcome	I can follow a sequence of instructions, e.g. in a flowchart and modify a flowchart using symbols	I can follow a sequence of instructions, e.g. in a flowchart and modify a flowchart using symbols

Knowledge	I know how to physically follow and give others instructions to move around	I know how to plan and enter a sequence of instructions to achieve an algorithm, with a robot, specifying distance and turn and drawing a trail	I know how to explore outcomes when giving sequences of instructions when using a piece of software	I know how to create and edit procedures typing logo commands including pen up, pen down & changing the trail of the turtle for example	I know how to write down the steps required (an algorithm) to achieve a desired outcome and refer to this when programming	I know how to Write a program which follows an algorithm to achieve a planned outcome for appropriate programming software
Skills		I can give a set of instructions to follow and predict what will happen	I can give a set of instructions to follow and predict what will happen	I can give a set of instructions to follow and predict what will happen	I can use conditional statements and edit variables	I can use conditional statements and edit variables
Knowledge		I know how to explore outcomes when giving instructions in a simple Logo program	I know how to plan and enter a sequence of instructions on a robot specifying distance and turn to achieve specific outcomes	I know how to use sensors to 'trigger' an action such as turning the lights on using Probot if it 'goes through a tunnel', or reversing if it touches something	I know how to refine procedures to improve efficiency	I know how to create statements and variables to provide a score/trigger an action in a game

Skills		I can improve/change their sequence of commands by debugging	I can keep testing a program and recognise when it needs to be debugged	I can keep testing a program and recognise when it needs to be debugged	I can decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program	I can decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program
Knowledge		I know how to identify where improvements can be made after testing, execute and debug any problems found	I know how to test and improve / debug programmed sequences	I know how to begin to correct errors (debug) as I program devices and actions on screen, and I know how to identify bugs in programs written by others.	I know how to identify difficulties and articulate a solution for errors in a program	I know how to create and then edit a program linking the changes required to solve a problem to the original algorithm

Skills		I can use key vocabulary to demonstrate knowledge and understanding in this strand: algorithm, instruction, order, debug, program, turn, left, right, clockwise, anticlockwise, blocks, sequence, project, repeat, repeat forever, invisible, grow, shrink.	I can use variables to create an effect, e.g. repetition, if, when, loop	I can use variables to create an effect, e.g. repetition, if, when, loop	I can keep testing a program and recognise when it needs to be debugged	I can keep testing a program and recognise when it needs to be debugged
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Knowledge		I know how to use the word debug to correct any mistakes when programming a floor robot	I know how to create an algorithm to tell a joke or a simple story	I know how to use an algorithm to sequence more complex programming into order	I know how to design my own game including sprites, backgrounds, scoring and/or timers and test and re-test (debug) until it is working as expected	I know how to write a program which follows an algorithm to solve a problem for a floor robot or other model and test and debug where necessary
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Skills			<p>I can use key vocabulary to demonstrate knowledge and understanding in this strand: decompose, decomposing, logical sequence, flowchart, sprite, block, command, algorithm, answer, correct, errors, program, algorithm, instructions, commands, forward (fd), left (lt), right (rt), move, turn, clear screen (cs), variable</p>	<p>I can use key vocabulary to demonstrate knowledge and understanding in this strand: decompose, decomposing, logical sequence, flowchart, sprite, block, command, algorithm, answer, correct, errors, program, algorithm, instructions, commands, forward (fd), left (lt), right (rt), move, turn, clear screen (cs), variable</p>	<p>I can use key vocabulary to demonstrate knowledge and understanding in this strand: flowchart, algorithm, control, output, symbol, start, stop, delay, process, decision, loop, backdrop, script, block, repeat, commentary, sequence, consequence, debug, program, Kodu, world, object, tool palette, program environment, smooth, flatten, raise</p>	<p>I can use key vocabulary to demonstrate knowledge and understanding in this strand: flowchart, algorithm, control, output, symbol, start, stop, delay, process, decision, loop, backdrop, script, block, repeat, commentary, sequence, consequence, debug, program, Kodu, world, object, tool palette, program environment, smooth, flatten, raise</p>
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Knowledge			I know how to explain to others what an algorithm is	I know how to begin to use programming terms when discussing/explaining my work	I know, with increasing confidence, the meaning of more complex programming terms	I know how to record in detail advanced and complex programming terms
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Online Safety

Skills	I can identify what things count as personal information	I can identify what things count as personal information	I can reflect on their own digital footprint and behaviour online	I can reflect on their own digital footprint and behaviour online	I can protect their password and other personal information	I can protect their password and other personal information
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Knowledge	I am starting to know what is appropriate and inappropriate behaviour on the internet	With increased confidence, I know what is appropriate and inappropriate behaviour on the internet	I know how to contribute to a class blog to share information and I understand who can see it, and how to communicate safely and respectfully	I know how to contribute to a class blog and can confidently explain how the information is shared and who can see it. I know how to communicate online safely and understand the repercussions of not being respectful online	I know why I should not share personal information and passwords. I understand what GDPR is.	With a high degree of confidence, I know why I should not share personal information and passwords. I understand what GDPR is.
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Skills	I can agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords	I can agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords	I can identify what is appropriate and inappropriate behaviour on the internet, recognising the term cyberbullying	I can identify what is appropriate and inappropriate behaviour on the internet, recognising the term cyberbullying	I can be a good online citizen and friend	I can be a good online citizen and friend
Knowledge	I know that I need to follow certain rules to remain safe when visiting places online.	I know that if I put information online it leaves a digital footprint or "trail" and I need to manage it so it is not hurtful to others	I know and can explain to others what cyberbullying is and what I need to do when I encounter it	I know and can confidently explain to others what cyberbullying is and make judgements to keep myself and others safe online I know how to recognise online behaviours that are unfair	I know how to behave responsibly online and what the likely consequences of my actions would be if I was not well-behaved online	I know I am a good role model for younger pupils

Skills	I can seek help from an adult when they see something that is unexpected or worrying	I can seek help from an adult when they see something that is unexpected or worrying	I can agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords	I can agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords	I can judge what sort of privacy settings might be relevant to reducing different risks	I can judge what sort of privacy settings might be relevant to reducing different risks
Knowledge	I know that many websites ask for information that is private but if I am unsure, I know how to responsibly handle such requests and who to talk to about any concerns I have	I know I need to follow certain rules to remain safe when visiting places online and I know that if I am worried or unsure I must tell someone.	I know how to sensibly follow e-safety rules for the classroom	I know I need to think before sending attachments or commenting on an online post and recognise the consequences of my actions.	I know who can and cannot see my information on the variety of online platforms I use.	I know how to protect devices from virus threats

Skills	I can demonstrate how to safely open and close applications and log on and log off from websites	I can demonstrate how to safely open and close applications and log on and log off from websites	I can seek help from an adult when they see something that is unexpected or worrying	I can seek help from an adult when they see something that is unexpected or worrying	I can seek help from an adult when they see something that is unexpected or worrying	I can seek help from an adult when they see something that is unexpected or worrying
Knowledge	I know how to load and play appropriate games on the internet and how to close them down when I have finished playing	I know how email can be used to communicate with real people within my school, family and community	I know what actions can be taken if I am uncomfortable or upset online e.g. Report Abuse button	I know how to identify dangers when presented with online scenarios, social networking profiles etc. and in these situations I know I must tell an adult when something worries me online	I know the importance of keeping an adult informed about what I am doing online, and how to report concerns	I know that I can report anything that is worrying me online to an adult and /or Childline and that I can access: https://www.ceop.police.uk/ceop-reporting/ to report suspicious and concerning online activity too

Skills	I can use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, key, question, tell, safe, share, stranger, danger, internet	I can use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, key, question, tell, safe, share, stranger, danger, internet	I can demonstrate understanding of age-appropriate websites and adverts	I can demonstrate understanding of age-appropriate websites and adverts	I can discuss scenarios involving online risk	I can discuss scenarios involving online risk
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Knowledge	I know about good and bad choices when using websites – being kind, telling a grown up if something upsets me and keeping myself safe by keeping information private	I know that many websites ask for information that is private and I am beginning to confidently and responsibly handle such requests	I can talk about what games I enjoy playing and what good choices are when playing games e.g. content and screen time	I know why there are age restrictions in place for certain games and what the age restrictions are. I know the difference between an appropriate and an inappropriate website.	I know what the risks are to myself when sending messages via email or in a chatroom, particularly if they are to people I have not met	I know, through online safety training, what the variety of online risks are and how to protect myself from them and can confidently discuss my own personal use of the internet and the choices I make to keep myself safe
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Skills			<p>I can use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, internet, world wide web, communicate, message, social media, email, password, cyberbullying/bullying, plagiarism, profiles, account, private, public</p>	<p>I can use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, internet, world wide web, communicate, message, social media, email, password, cyberbullying/bullying, plagiarism, profiles, account, private, public</p>	<p>I can use key vocabulary to demonstrate knowledge and understanding in this strand: spam, link, privacy, virus, scam, phishing, inbox, junk, sender, subject, secure, safe, account, online, private, social media, adverts, cyberbullying, reporting, anonymous, victim, fraud/fraudulent, policy, private/personal</p>	<p>I can use key vocabulary to demonstrate knowledge and understanding in this strand: spam, link, privacy, virus, scam, phishing, inbox, junk, sender, subject, secure, safe, account, online, private, social media, adverts, cyberbullying, reporting, anonymous, victim, fraud/fraudulent, policy, private/personal</p>	

Knowledge			<p>I know what a password is and how to choose a secure password for age-appropriate websites</p>	<p>I know what to do to keep myself safe online and what the consequences will be if I don't.</p>	<p>I know what to do to keep myself safe online and what the consequences will be if I don't.</p> <p>I know what agencies and adults I can speak to about online abuse</p> <p>I know what information I need to keep private and how to do so</p>	<p>I know with confidence what to do to keep myself safe online and what the consequences will be if I don't.</p> <p>I know what agencies and adults I can speak to about online abuse</p> <p>I know what information I need to keep private and how to do so</p>
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