Computing Long Term Plan from 2022

This longterm plan incorporates assessment points and the progression of skills and must be used alongside the vocabulary progression for computing.

:	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1/2 Rotation A	**Beebots** - Knows how a robot can move forwards and backwards (algorithms) - Use the stop and go commands - Use trial and error to program a robot to move and turn (Y1) - Plan a sequence of instructions and program robot to follow these instructions (Y2) _ Predict what a programme will do. - Relating every day devices to programming instructions	**Music/Audio devices** - talk about how IT can be used outside of school. - Use a computer program to compose a piece of music for a specific purpose - Use a microphone or other recording device to record sounds	**Beebots** - Program a robot to move in different directions and turn at different angles - Know that a robot can repeat instructions - Program, test and debug a sequence of instructions to move a robot (Y2)	**Word Processing** - talk about how IT can be used inside of school. (e-mails Y2) - Use keyboard to navigate, add and edit text in a document. - Use Caps Lock and full stop keyboard function to correctly punctuate text. - Change the font size, style and colour of text - Save and load work (Y1 following a prompt sheet)	**Ipad Bee-bots (Y1) / Blue Bots (Y2)** - Program a robot to move in different directions and reach an intended destination. - Know that a robot can repeat instructions - Program, test and debug a sequence of instructions to move a robot(Y2)	**Graph Drawing/ Databases** - Children can present data in tables. - Children can create a graph from their data Link to long term study in science.
Resources	**Beebots, Beebot Mats, Human Crane, Whiteboards, Beebot cards**	**Music Toolkit (in 2 simple) or Chrome Music Lab**	**Beebots, Beebot Mats, "Teacher Robot", Whiteboards, Beebot cards**	**2Type, 2Publish, 2create, 2 create a story Yr2 – MS Word**	**Ipads**	**2Calculate**
Key Skills (Y1)	Understand the term algorithm. Understand programs use algorithms. Create simple programs (one step at a time) Predict what a program will do.	Can talk about the way they use IT outside of school. Pupils can use devices to create digital content. Following a prompt sheet can save digital content. Can turn a computer on/off correctly – e.g. shutdown.	Understand the term algorithm. Understand programs use algorithms. Create simple programs (one step at a time) Predict what a program will do.	Can talk about the way they use IT outside of school. Pupils can use devices to create digital content. Following a prompt sheet can save digital content. Can turn a computer on/off correctly – e.g. shutdown.	Understand the term algorithm. Understand programs use algorithms. Create simple programs (one step at a time) Predict what a program will do.	Can talk about the way they use IT outside of school. Pupils can use devices to create digital content. Following a prompt sheet can save digital content. Can turn a computer on/off correctly – e.g. shutdown.

Computing Long Term Plan from 2022

		Log in following a prompt sheet. Use mouse and keyboard appropriately.		Log in following a prompt sheet. Use mouse and keyboard appropriately.		Log in following a prompt sheet. Use mouse and keyboard appropriately.
Year 1 Assessment point	**Programming** - Create simple programs (one step at a time).	**Software Skills -** Following a prompt sheet can save digital content.	**Programming -** Predict what a program will do.	**Hardware Skills -** Use a mouse and keyboard appropriately	**Programming -** Understand programs use algorithms.	**Operating System Skills -** Log in and shut down computers correctly.
Key Skills (Y2)	Recognise a sequence of instructions as an algorithm. Create and debug simple programs using a sequence of instructions. Predict behaviour of simple programs.	Save and load digital content. For a given purpose can create their own digital content. Find and open an appropriate program using double click with the mouse. Operate technical devices appropriately with respect for fragility of hardware devices. Show greater control of the mouse and keyboard.	Recognise a sequence of instructions as an algorithm. Create and debug simple programs using a sequence of instructions. Predict behaviour of simple programs.	Understand the idea that IT can be used for communication across the school. Be aware of e-mail, chats on games and other ways people may communicate online. Save and load digital content. For a given purpose can create their own digital content. Find and open an appropriate program using double click with the mouse. Operate technical devices appropriately with respect for fragility of hardware devices.	Recognise a sequence of instructions as an algorithm. Create and debug simple programs using a sequence of instructions. Predict behaviour of simple programs. Show greater control of the mouse and keyboard.	Save and load digital content. For a given purpose can create their own digital content. Find and open an appropriate program using double click with the mouse. Operate technical devices appropriately with respect for fragility of hardware devices.
Year 2 Assessment point	**Programming** - Create and debug simple programs.	**Software Skills -** Save and load digital content.	**Programming** - Predict the behaviour of simple programs.	**Hardware Skills -** Find and open using 'double click' with a mouse.	**Programming** - Recognise a sequence of instructions as an example of an algorithm.	**Software Skills -** For a given purpose they can create their own digital content.
Online Safety discreet learning outside of PDL or topics above: Assessment point to be assessed by the end of the academic year.	**What is the internet? (Y1)** Know what the internet is. Many people can use the internet at one time. Know what a stranger is and that they exist online. **How can we communicate online? (Y2)** Understand we can communicate online. Think about others feelings when using the internet. Recognise inappropriate content and who to tell.					

Computing Long Term Plan from 2022

:	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1/2 Rotation B	**Beebots** - Knows how a robot can move forwards and backwards (algorithms) - Use the stop and go commands - Use trial and error to program a robot to move and turn (Y1) - Plan a sequence of instructions and program robot to follow these instructions (Y2) _ Predict what a programme will do. - Relating every day devices to programming instructions	**Ipad Bee-bots (Y1) / Blue Bots (Y2)** - Program a robot to move in different directions and reach an intended destination. - Know that a robot can repeat instructions - Program, test and debug a sequence of instructions to move a robot(Y2)	**Animation** **Film Making** - Children can use a digital camera to record a film for a purpose. - Children can use art package skills to create an animation for a specific purpose.	**Digital Photography** - Take a still photograph - Manipulate a photograph for a purpose - Save and load work (Y1 following a prompt sheet) **Art Packages** - Use a range of tools to create a piece of art work for a specific purpose - Use various tools such as brushes, pens, rubber, stamps, shapes. ANDY WARHOL - Save and load work (Y1 following a prompt sheet)	**Word Processing** - talk about how IT can be used inside of school. (e-mails Y2) - Use keyboard to navigate, add and edit text in a document. - Use the spell check function to identify correct spelling - Change the font size, style and colour of text - Begin (with support) inserting images and text boxes	**Beebots** - Program a robot to move in different directions and turn at different angles - Know that a robot can repeat instructions - Program, test and debug a sequence of instructions to move a robot (Y2)
Resources	**Beebots, Beebot Mats, Human Crane, Whiteboards, Beebot cards**	**Ipads**	**2Animate**	**Photo Simple** **Digital Cameras** **2Paint a picture**	**2Type, 2Publish, 2create, 2 create a story** **Yr2 – MS Word**	**Beebots, Beebot Mats, "Teacher Robot", Whiteboards, Beebot cards**
Key Skills (Y1)	Understand the term algorithm. Understand programs use algorithms. Create simple programs (one step at a time) Predict what a program will do.	Understand the term algorithm. Understand programs use algorithms. Create simple programs (one step at a time) Predict what a program will do.	Can talk about the way they use IT outside of school. Pupils can use devices to create digital content. Following a prompt sheet can save digital content.	Can talk about the way they use IT outside of school. Pupils can use devices to create digital content. Following a prompt sheet can save digital content.	Can talk about the way they use IT outside of school. Pupils can use devices to create digital content. Following a prompt sheet can save digital content.	Understand the term algorithm. Understand programs use algorithms. Create simple programs (one step at a time) Predict what a program will do.

Computing Long Term Plan from 2022

			Can turn a computer on/off correctly – e.g. shutdown. Log in following a prompt sheet. Use mouse and keyboard appropriately.	Can turn a computer on/off correctly – e.g. shutdown. Log in following a prompt sheet. Use mouse and keyboard appropriately.	Can turn a computer on/off correctly – e.g. shutdown. Log in following a prompt sheet. Use mouse and keyboard appropriately.	
Year 1 Assessment point	**Programming** - Create simple programs (one step at a time).	**Programming** - Predict what a program will do.	**Software Skills -** Following a prompt sheet can save digital content.	**Hardware Skills -** Use a mouse and keyboard appropriately	**Operating System Skills -** Log in and shut down computers correctly.	**Programming** - Understand programs use algorithms.
Key Skills (Y2)	Recognise a sequence of instructions as an algorithm. Create and debug simple programs using a sequence of instructions. Predict behaviour of simple programs.	Recognise a sequence of instructions as an algorithm. Create and debug simple programs using a sequence of instructions. Predict behaviour of simple programs. Show greater control of the mouse and keyboard.	Save and load digital content. For a given purpose can create their own digital content. Find and open an appropriate program using double click with the mouse. Operate technical devices appropriately with respect for fragility of hardware devices.	Save and load digital content. For a given purpose can create their own digital content. Find and open an appropriate program using double click with the mouse. Operate technical devices appropriately with respect for fragility of hardware devices.	Understand the idea that IT can be used for communication across the school. Be aware of e-mail, chats on games and other ways people may communicate online. Save and load digital content. For a given purpose can create their own digital content. Find and open an appropriate program using double click with the mouse. Operate technical devices appropriately with respect for fragility of hardware devices.	Recognise a sequence of instructions as an algorithm. Create and debug simple programs using a sequence of instructions. Predict behaviour of simple programs.
Year 2 Assessment point	**Programming** - Create and debug simple programs.	**Programming** - Predict the behaviour of simple programs.	**Software Skills -** Save and load digital content.	**Software Skills -** For a given purpose they can create their own digital content.	**Hardware Skills** - Find and open using 'double click' with a mouse.	**Programming** - Recognise a sequence of instructions as an example of an algorithm.
Online Safety discreet learning outside of PDL or topics above: Assessment point to be assessed by the end of the academic year.	**What is the internet? (Y1)** Many people can use the internet at one time. Know what a stranger is and that they exist online. **How can we communicate online? (Y2)** Understand we can communicate online. Think about others feelings when using the internet.					

Computing Long Term Plan from 2022

		Recognise inappropriate content and who to tell.				
:	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 3/4 Rotation A	**Word Processing.** - Manipulate and organise text (Bold, Underline, Font, Size, centre, bullet points) - Insert text box, clip art, images and word art. - Change orientation of the page, understand margins and use borders. - Copy and paste within word or from the internet. - Insert and format a table - Use spell checker	**Flowol/Control** - Identify a physical system simulated on a screen (Robot) -Design, write and debug programs that achieve a specific goal(Y3) or to a design brief (Y4) - Make simple adaptations to an existing programme (Y4) - Predict the outcome of a sequence - Identify input and output devices	**Internet as a source of information/ Online Communication.** -understand computers are connected via networks through the internet and people can communicate through these. - Can access an existing link to open a webpage - Search the internet and know why it is important to use safe search skills - Understand that websites have an address which is reflective of location (.co.uk or .com) - And eSafety Skills	**Art Packages.** - Acquire, store and combine images from cameras or the internet for a purpose. - Use the print screen function to capture an image. - Select certain areas of an image and resize, rotate and invert the image. - Edit pictures using a range of tools in a graphics program.	**Animation/Film Making AND Music Audio Devices.** - Create a multi-scene animation with awareness of camera angle - Change the speed of playback in an animation using pre-made models - Use a microphone to record sounds - Use a camcorder with support - Import music and film clips - Combine film and music clips - Copy and paste audio clips - Add basic titles and credits to a film	**Scratch** -Design, write and debug programs that achieve a specific goal(Y3) or to a design brief (Y4) - Make simple adaptations to an existing programme (Y4) - Insert, create and edit own sprite. - Insert, create and edit the background - Use the control menu to begin and end scripts - Create a script to move a sprite - Uses the '**change**' blocks within the appearance menu to alter their sprites appearance (Y3) - Identify and use input and output devices - Debug errors within a script - Predict the outcome of a sequence - Program commands in an appropriate order including loops(Y4)
Resources	**MS Word, MS Publisher**	**Flowol, Control boxes (hardware)**	**Internet Explorer, Chrome**	**MS Paint**	**I Can Animate 2 Audacity**	**Scratch**
Key Skills (Y3)	Can use some software with support. Children can create digital content	Design, write and debug programs that	Understand computers are connected via networks through the internet and people can	Can use some software with support. Children can create digital	Identify input (microphone and speakers) and output devices and how these work together.	Design, write and debug programs that achieve a specific goal.

	using laptops or desktop computers. Children can use a computer to research information. Can also understand search engines to find content online. Different software has different uses. Find the appropriate programme using the search bar. Save their work properly. Understand the importance of a tidy workspace and keeping your hardware clean.	achieve a specific goal. Identify where a physical system has been simulated on screen. Create a sequence using on screen programming. Identify output devices (e.g. traffic lights). Pupils can explain/predict what their algorithm will do onscreen. Pupils can spot errors in algorithms.	communicate through messaging services. Children can use a computer to research information. Can also understand search engines to find content online. Recognise inappropriate content and how to report online and who to tell.	content using laptops or desktop computers. Different software has different uses. Find the appropriate programme using the search bar. Save their work properly. Understand the importance of a tidy workspace and keeping your hardware clean.	Can use some software with support. Children can create digital content using laptops or desktop computers. Different software has different uses. Find the appropriate programme using the search bar. Save their work properly. Understand the importance of a tidy workspace and keeping your hardware clean.	Identify where a physical system has been simulated on screen. E.g. computer games. Create a sequence using on screen programming. Identify input (mouse and keyboard) and output devices and how these work together. Pupils can explain/predict what their algorithm will do onscreen. Pupils can spot errors in algorithms.
Year 3 Assessment point	**Software Skills -** To understand different software has different uses.	**Programming** - Create a sequence using on screen programming	**Software Skills -** To understand and use search engines to find content online.	**Operating Skills -** To save their work properly.	**Software Skills -** Children can create digital content using laptops or desktop computers.	**Programming** - Design, write and debug programs that achieve a specific goal.
Key Skills (Y4)	Children can select appropriate software for chosen topic. They can plan a project and use appropriate software to complete it. Collect research with a specific topic in mind using browser and search tools on specific web pages. Can select web pages using key words through search engines.	Pupils can design some elements of a program to a given brief. Pupils can come up with simple adaptations to a program. Pupils can program commands in an appropriate	Children understand that the internet is a network of networks e.g 'school network' can communicate with other 'networks' such as messaging services and public facing webpages. Collect research with a specific topic in mind using browser and search tools on specific web pages.	Children can select appropriate software for chosen topic. They can plan a project and use appropriate software to complete it. Can select web pages using key words through search engines.	Children can select appropriate software for chosen topic. They can plan a project and use appropriate software to complete it. Demonstrate good practice of a clean and tidy workspace when using digital hardware. Retrieve previously saved work.	Pupils can design some elements of a program to a given brief including simple inputs. Pupils can come up with simple adaptations to a program. Pupils can program commands in an appropriate order including loops. Pupils can explain a simple sequence based algorithm. Pupils can use logical reasoning to detect errors in a code.

	Demonstrate good practice of a clean and tidy workspace when using digital hardware. Retrieve previously saved work.	order including loops. Pupils can explain a simple sequence based algorithm. Pupils can use logical reasoning to detect errors in a code.	Can select web pages using key words through search engines.	Demonstrate good practice of a clean and tidy workspace when using digital hardware. Retrieve previously saved work.		
Year 4 Assessment point	**Software Skills -** Children can select appropriate software for chosen topic.	**Programming** - Pupils can design some elements of a program to a given brief.	**Software Skills -** Can select web pages using key words through search engines.	**Operating Skills -** Retrieve previously saved work.	**Software Skills -** They can plan a project and use appropriate software to complete it.	**Programming** - Pupils can program commands in an appropriate order including loops.
Online Safety discreet learning outside of PDL or topics above: Assessment point to be assessed by the end of the academic year.	**Recognise inappropriate content and how to report it.(year 3)** Explain good and bad examples of online behaviour Consider the content of a messge and how the receiver will feel. **Can identify dangers in online scenarios (Year 4)** Spot social networking opportunities through online activities. Know how to stay safe online. Know the effect of cyber bullying.					

Computing Long Term Plan from 2022

Year 3/4 Rotation B	**Logo/Probots.** - Create a script to move the 'bot' for a specific goal(Y3) or to a given brief (Y4) - Use and change colour of the pen tool (use eye dropper tool) - Debug errors within a script - Predict the outcome of a sequence - Use the **repeat** function (Y4)	**Word Processing and Digital Photography** - Manipulate and organise text (Bold, Underline, Font, Size, centre, bullet points) - Insert text box, and pictures taken with a digital camera. - Change orientation of the page, understand margins and use borders. - Copy and paste within word and images from the internet. - Insert and format a table - Use spell checker	**Graph Drawing/ Databases/Data Logging** - Input, amend and delete data in a database - Search the database (Using AND / OR questions) - Present data in a variety of ways, using tables and graphs appropriate to the audience. - Data logging alongside science	**Scratch** -Design, write and debug programs that achieve a specific goal(Y3) or to a design brief (Y4) - Make simple adaptations to an existing programme (Y4) - Insert, create and edit own sprite. - Insert, create and edit the background - Use the control menu to begin and end scripts - Create a script to move a sprite - Uses the **'change'** blocks within the appearance menu to alter their sprites appearance (Y3) - Identify and use input and output devices - Debug errors within a script - Predict the outcome of a sequence - Program commands in an appropriate order including loops(Y4)	**Multimedia/Digital Presentations.** -Understand computers are connected via networks through the internet and people can communicate through these. -Plan a project using appropriate software (Y4) - Add pictures and sound to slides - Can create a new and delete unwanted slides - Create main titles and text boxes on a slide and populate, changing the appearance using existing skills - Include transitions between slides within a presentation - Change the background colour and the font of a slide	**Air Brick** What do the children need?
Resources	**2ControlNXT, FMS Logo, Probots**	**Cameras (hardware) MS Publisher, MS Paint,**	**MS Excel, 2Investigate Junior Librarian**	**Scratch**	**MS PowerPoint**	

Computing Long Term Plan from 2022

Key Skills (Y3)	Design, write and debug programs that achieve a specific goal. Identify where a physical system has been simulated on screen. E.g. computer games. Create a sequence using on screen programming. Identify input (mouse and keyboard) and output devices and how these work together. Pupils can explain/predict what their algorithm will do onscreen. Pupils can spot errors in algorithms.	Can use some software with support. Children can create digital content using laptops or desktop computers. Children can use a computer to research information. Can also understand search engines to find content online. Different software has different uses. Find the appropriate programme using the search bar. Save their work properly. Understand the importance of a tidy workspace and keeping your hardware clean.	Can use some software with support. Children can create digital content using laptops or desktop computers. Different software has different uses. Find the appropriate programme using the search bar. Save their work properly. Understand the importance of a tidy workspace and keeping your hardware clean.	Design, write and debug programs that achieve a specific goal. Identify where a physical system has been simulated on screen. E.g. computer games. Create a sequence using on screen programming. Identify input (mouse and keyboard) and output devices and how these work together. Pupils can explain/predict what their algorithm will do onscreen. Pupils can spot errors in algorithms.	Can use some software with support. Children can create digital content using laptops or desktop computers. Different software has different uses. Find the appropriate programme using the search bar. Save their work properly. Understand the importance of a tidy workspace and keeping your hardware clean.	
Year 3 *Assessment point*	**Programming -** Design, write and debug programs that achieve a specific goal.	**Software Skills -** To understand and use search engines to find content online.	**Software Skills -** To understand different software has different uses.	**Programming -** Create a sequence using on screen programming	**Operating System Skills -** To save their work properly.	**Software Skills -** Children can create digital content using laptops or desktop computers.
Key Skills (Y4)	Pupils can design some elements of a program to a given brief. Pupils can come up with simple adaptations to a program. Pupils can program commands in an appropriate order including loops. Pupils can explain a simple sequence based algorithm.	Children understand that the internet is a network of networks e.g 'school network' can communicate with other 'networks' such as messaging services and public facing webpages. Collect research with a specific topic in mind using browser and search tools on specific web pages.	Children can select appropriate software for chosen topic. They can plan a project and use appropriate software to complete it. Demonstrate good practice of a clean and tidy workspace when using digital hardware. Retrieve previously saved work.	Pupils can design some elements of a program to a given brief including simple inputs. Pupils can come up with simple adaptations to a program. Pupils can program commands in an appropriate order including loops. Pupils can explain a simple sequence based algorithm.	Children can select appropriate software for chosen topic. They can plan a project and use appropriate software to complete it. Can select web pages using key words through search engines. Demonstrate good practice of a clean and	

Computing Long Term Plan from 2022

	Pupils can use logical reasoning to detect errors in a code.	Can select web pages using key words through search engines.		Pupils can use logical reasoning to detect errors in a code.	tidy workspace when using digital hardware. Retrieve previously saved work.	
Year 4 Assessment point	**Programming -** Pupils can design some elements of a program to a given brief.	**Software Skills -** Can select web pages using key words through search engines.	**Software Skills -** Children can select appropriate software for chosen topic.	**Programming -** Pupils can program commands in an appropriate order including loops.	**Operating System Skills -** Retrieve previously saved work.	**Software Skills -** They can plan a project and use appropriate software to complete it.
Online Safety discreet learning outside of PDL or topics above: Assessment point to be assessed by the end of the academic year.	**Recognise inappropriate content and how to report it.(year 3)** Explain good and bad examples of online behaviour Consider the content of a messge and how the receiver will feel. **Can identify dangers in online scenarios (Year 4)** Spot social networking opportunities through online activities. Know how to stay safe online. Know the effect of cyber bullying.					

Computing Long Term Plan from 2022

:	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 5/6 Rotation A	**Scratch** - Understands how to read the coordinates - Begins to use operators to link external devices - Add **variables** to change an item in the script (Y6) - Can 'debug' (recognise errors) within a script - Predict the effect of changing a variable - Can add **sensing** blocks within an operator - Uses **'if' and 'else'** blocks (Y5) -can predict outcome of an algorithm that uses as and if. - decompose and adapt a program to create their own. - Create more complex instructions incorporating all tools	**Internet as a source of information/ Online Communication.** - Understand the meaning and law of copyright when researching from the web and can explain the term plagiarism - Use a more complex search engine to find information/media (use AND and OR in search) and understand how search engines retrieve this information - Know how to search specifically for images, videos, news etc. - Analyse the accuracy of information online and double check with another source - understand and use the safe search functions. **Word Processing** - Change the order of the text using the sorting tool - Use paragraph / line spacing - Insert shapes using the shapes tool - Format the colour of a textbox and shape - Knows how to insert a hyperlink - Change the direction of the text - Insert symbols - Use Find, Search and Replace - Sue keyboard shortcuts.	**Crumble** - Begins to use operators to link external devices - Add **variables** to change an item in the script - Can 'debug' (recognise errors) within a script - Design an instruction in response to a brief - Create more complex instructions incorporating all tools - Pupils can apply programming skills to new programming language with physical system output (Y6) ***Link to controllable moon buggies – potential link to DT topic.***	**Air Brick** What do the children need?	**Multimedia/DTP** **(5 Min Talks)** - Be aware of the different presentation software available and know the advantages and disadvantages of each - Change the path of frames within a presentation - Insert edited film and animation clips to a presentation - Know the appropriate sounds, images and style to use for the audience and purpose - connect devices to transfer content beyond a physical connection (Y6).	**Digital Photography** **Art Packages** - combine software programmes to create a project. - Use preciously learnt skills for a specific purpose. - Use layers to create edited images. ***Link to science long term study, rivers unit and end of year memories photographs***
	Scratch	**MS Word** **Internet Explorer**	**Crumble**		**MS PowerPoint, Prezzi**	**Ipads, Ibis Paint**
Key Skills (Y5)	Pupils can adapt a given program to create their own. Pupils can break problems into their component parts. Pupils to use selection (as and if) in their programming.	Computing can communicate through broader networks such as Bluetooth accessing speakers etc. Understand that devices can be connected to share digital content. Child can use and combine software programmes to create a project.	Pupils can adapt a given program to create their own. Pupils understand physical systems can be controlled by a computer. Pupils can break problems into their component parts.		Children can understand and use a safe search mode on a search engine. Understand how google looks for key words and reporting systems to identify if a website is safe. To identify how google ranks web pages based on what is searched.	Child can use and combine software programmes to create a project.

	Pupils can write a program that uses keyboard inputs. Pupils can predict outcome of an algorithm using as and if. Pupils can identify errors in an algorithm.		Pupils can identify errors in an algorithm.		Pupils can evaluate information and its quality and reliability. Shortcuts using keyboard e.g ctrl C for copying.	
Year 5 Assessment point	**Programming** - Pupils to use selection (as and if) in their programming.	**Network Skills** - Computing can communicate through broader networks such as Bluetooth accessing speakers etc.	**Programming** - Pupils can break problems into their component parts.		**Software Skills** - Understand how google looks for key words and reporting systems to identify if a website is safe.	**Software Skills** - Child can use and combine software programmes to create a project.
Key Skills (Y6)	Children can plan a solution to a problem. Pupils to use variables in their programming. Pupils can identify errors in algorithms and explain why they think it is incorrect.	Can explain how different networks are used for different purposes and choose the appropriate network to match the task. E.g Bluetooth for speakers. Connect devices together to transfer content beyond physical connection. e.g wireless connections. Children understand search engines work in other programmes. E.g such as the app store. Children can combine programmes across multiple devices.	Pupils can apply programming skills to a new programing language. Pupils can write programs with a physical system output. Children can plan a solution to a problem. Pupils can identify errors in algorithms and explain why they think it is incorrect.		Use internet resources to learn new skills e.g use google to teach them a skill within programmes. Learn further shortcuts using the keyboards including 'functions'.	Children can combine programmes across multiple devices.
Year 6 Assessment point	**Programming** - Pupils to use variables in their programming.	**Network Skills** - Can explain how different networks are used for different purposes and choose the appropriate network to match the task. E.g Bluetooth for speakers.	**Programming** - Pupils can write programs with a physical system output.		**Software Skills** - Use internet resources to learn new skills e.g use google to teach them a skill within programmes.	**Software Skills** - Children can combine programmes across multiple devices.
Online Safety discreet learning outside of PDL or topics above:	**Recognise different types of inappropriate content online and how to report(Y5) or block this content (Y6)** **Act as a role model to others on how to stay safe online. (Y5)** **Explain the dangers of communicating online (Y5)**					

Computing Long Term Plan from 2022

Assessment point to be assessed by the end of the academic year.	**CEOP button (Y6)** **Privacy settings (Y6)**

:	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 5/6 Rotation B	**Scratch** - Understands how to read the coordinates - Add **variables** to change an item in the script (Y6) - Can 'debug' (recognise errors) within a script - Predict the effect of changing a variable - Can add **sensing** blocks within an operator - Uses **'if' and 'else'** blocks (Y5) -can predict outcome of an algorithm that uses as and if. - decompose and adapt a program to create their own. - Create more complex instructions incorporating all tools	**Word Processing** - Change the order of the text using the sorting tool - Use paragraph / line spacing - Insert shapes using the shapes tool - Format the colour of a textbox and shape - Knows how to insert a hyperlink - Change the direction of the text - Insert symbols - Use Find, Search and Replace	**Internet and Networks** - Understand broder computer networks - Understand how search engines work (across multiple platforms (Y6)). **Graph Drawing/ Databases/ Data logging** - Able to populate rows and columns with data - Can present their data on a variety of charts (bar, pie and column) - Can identify the coordinates of a cell - Can put data into ascending and descending order - Begins to filter data - Use a spreadsheet to explore patterns in numbers - Know how to input formulas into a spreadsheet Can use a spreadsheet to answer questions and solve problems	**Air Brick** What do the children need?	**Multimedia/DTP (5 Min Talks)** - Be aware of the different presentation software available and know the advantages and disadvantages of each - Change the path of frames within a presentation - Insert edited film and animation clips to a presentation - Know the appropriate sounds, images and style to use for the audience and purpose - connect devices to transfer content beyond a physical connection (Y6).	**Crumble** - Begins to use operators to link external devices - Add **variables** to change an item in the script - Can 'debug' (recognise errors) within a script - Design an instruction in response to a brief - Create more complex instructions incorporating all tools - Pupils can apply programming skills to new programming language with physical system output (Y6) ***Link to controllable moon buggies – potential link to DT topic.***
	Networks Box in ICT Suite Scratch	**MS Word**	**MS Excel**		**MS PowerPoint, Prezzi**	**Crumble**
Key Skills (Y5)	Pupils can adapt a given program to create their own. Pupils can break problems into their component parts. Pupils to use selection (as and if) in their programming. Pupils can write a program that uses keyboard inputs.	Child can use and combine software programmes to create a project. Shortcuts using keyboard e.g ctrl C for copying.	Computing can communicate through broader networks such as Bluetooth accessing speakers etc. Understand that devices can be connected to share digital content.		Children can understand and use a safe search mode on a search engine. Understand how google looks for key words and reporting systems to identify if a website is safe.	Pupils can adapt a given program to create their own. Pupils understand physical systems can be controlled by a computer.

Computing Long Term Plan from 2022

	Pupils can predict outcome of an algorithm using as and if. Pupils can identify errors in an algorithm.		Child can use and combine software programmes to create a project.		To identify how google ranks web pages based on what is searched. Pupils can evaluate information and its quality and reliability. Shortcuts using keyboard e.g ctrl C for copying.	Pupils can break problems into their component parts. Pupils can identify errors in an algorithm.
Year 5 Assessment point	**Programming** - Pupils to use selection (as and if) in their programming.	**Software Skills** - Child can use and combine software programmes to create a project.	**Network Skills** - Computing can communicate through broader networks such as Bluetooth accessing speakers etc.		**Software Skills** - Understand how google looks for key words and reporting systems to identify if a website is safe.	**Programming** - Pupils can break problems into their component parts.
Key Skills (Y6)	Children can plan a solution to a problem. Pupils to use variables in their programming. Pupils can identify errors in algorithms and explain why they think it is incorrect.	Children can combine programmes across multiple devices. Learn further shortcuts using the keyboards including 'functions'.	Can explain how different networks are used for different purposes and choose the appropriate network to match the task. E.g Bluetooth for speakers. Connect devices together to transfer content beyond physical connection. e.g wireless connections. Children understand search engines work in other programmes. E.g such as the app store. Children can combine programmes across multiple devices.		Use internet resources to learn new skills e.g use google to teach them a skill within programmes. Learn further shortcuts using the keyboards including 'functions'.	Pupils can apply programming skills to a new programing language. Pupils can write programs with a physical system output. Children can plan a solution to a problem. Pupils can identify errors in algorithms and explain why they think it is incorrect.
Year 6 Assessment point	**Programming** - Pupils to use variables in their programming.	**Software Skills** - Children can combine programmes across multiple devices.	**Network Skills** - Can explain how different networks are used for different purposes and choose the appropriate network		**Software Skills** - Use internet resources to learn new skills e.g use google to teach them a skill within programmes.	**Programming** - Pupils can write programs with a physical system output.

			to match the task. E.g Bluetooth for speakers.			
Online Safety discreet learning outside of PDL or topics above: Assessment point to be assessed by the end of the academic year.	**Recognise different types of inappropriate content online and how to report(Y5) or block this content (Y6)** **Act as a role model to others on how to stay safe online. (Y5)** **Explain the dangers of communicating online (Y5)** **CEOP button (Y6)** **Privacy settings (Y6)**					