

# Computing Whole School Overview



KS1		LKS2		UKS2		
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
<p><b>NC Objectives KS1</b></p> <p>Pupils should be taught to:</p> <ol style="list-style-type: none"> <li>1. understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</li> <li>2. create and debug simple programs</li> <li>3. use logical reasoning to predict the behaviour of simple programs</li> <li>4. use technology purposefully to create, organise, store, manipulate and retrieve digital content</li> <li>5. recognise common uses of information technology beyond school</li> <li>6. 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.</li> </ol>		<p><b>NC Objectives KS2</b></p> <p>Pupils should be taught to:</p> <ol style="list-style-type: none"> <li>1. design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> <li>2. use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>3. use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> <li>4. 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</li> <li>5. use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</li> <li>6. 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</li> <li>7. use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</li> </ol> <p>Lessons based on the Teach Computing scheme resources</p>				
<p><b>AU1</b></p>	<p><b>Computing systems and networks – Technology around us</b></p> <p><b>NC:</b> (link to National Curriculum)</p> <ol style="list-style-type: none"> <li>4. use technology purposefully to create, organise, store, manipulate and retrieve digital content</li> <li>5. recognise common uses of information technology beyond school</li> <li>6. 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.</li> </ol>	<p><b>Computing systems and networks – IT around us</b></p> <p><b>NC:</b> (link to National Curriculum)</p> <ol style="list-style-type: none"> <li>4. use technology purposefully to create, organise, store, manipulate and retrieve digital content</li> <li>5. recognise common uses of information technology beyond school</li> <li>6. 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.</li> </ol> <p><b>Objectives:</b></p>	<p><b>Computing systems and networks – Connecting computers</b></p> <p><b>NC:</b> (link to National Curriculum)</p> <ol style="list-style-type: none"> <li>2. use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>4. 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</li> <li>6. 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</li> </ol>	<p><b>Computing systems and networks – The Internet</b></p> <p><b>NC:</b> (link to National Curriculum)</p> <ol style="list-style-type: none"> <li>4. 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</li> <li>5. use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</li> <li>6. 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,</li> </ol>	<p><b>Computing systems and networks - Systems and searching</b></p> <p><b>NC:</b> (link to National Curriculum)</p> <ol style="list-style-type: none"> <li>1. design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> <li>2. use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>4. 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</li> <li>6. 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</li> <li>7. use technology safely, respectfully and responsibly;</li> </ol>	<p><b>Computing systems and networks - Communication and collaboration</b></p> <p><b>NC:</b> (link to National Curriculum)</p> <ol style="list-style-type: none"> <li>4. 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</li> <li>6. 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</li> <li>7. use technology safely, respectfully and responsibly;</li> </ol>

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<p><b>Objectives:</b>          -To identify technology          -To identify a computer and its main parts          -To use a mouse in different ways          -To use a keyboard to type on a computer          -To use the keyboard to edit text          -To create rules for using technology responsibly</p>	<p>-To recognise the uses and features of information technology          -To identify the uses of information technology in the school          -To identify information technology beyond school          -To explain how information technology helps us          -To explain how to use information technology safely          -To recognise that choices are made when using information technology</p>	<p><b>Objectives:</b>          -To explain how digital devices can change the way we work          -To identify input and output devices          -To recognise how digital devices can change the way we work          -To explain how a computer network can be used to share information          -To explore how digital devices can be connected          -To recognise the physical components of a network</p>	<p>including collecting, analysing, evaluating and presenting data and information          7. use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p><b>Objectives:</b>          -To describe how networks physically connect to other networks          -To recognise how networked devices make up the internet          -To outline how websites can be shared via the World Wide Web (WWW)          -To describe how content can be added and accessed on the World Wide Web (WWW)          -To recognise how the content of the WWW is created by people          -To evaluate the consequences of unreliable content</p>	<p>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</p> <p><b>Objectives:</b>          -To explain that computers can be connected together to form systems          -To recognise the role of computer systems in our lives          -To experiment with search engines          -To describe how search engines select results          -To explain how search results are ranked          -To recognise why the order of results is important, and to whom</p>	<p>recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p><b>Objectives:</b>          -To explain the importance of internet addresses          -To recognise how data is transferred across the internet          -To explain how sharing information online can help people to work together          -To evaluate different ways of working together online          -To recognise how we communicate using technology          -To evaluate different methods of online communication</p>
<p><b>Why?</b>          Give children an understanding of technology and how it works.</p>	<p><b>Why?</b>          Children think about what we used IT for and learn about how we can keep safe online.</p>	<p><b>Why?</b>          Give children an understanding of how technology can help us and makes some jobs easier.</p>	<p><b>Why?</b>          Understanding of the WWW and how networks are used to help us all connect online.</p>	<p><b>Why?</b>          Understanding of how systems work.</p>	<p><b>Why?</b>          Understanding of how information and data is transferred across the internet. Identify how we can work together online by communication via technology</p>
<p><b>Why now?</b>          Begin to introduce technology to children.           Begin to think about safety when online.</p>	<p><b>Why now?</b>          Build on last year's knowledge of what technology is, now thinking in more depth about IT such as the different areas of school and how technology is used.</p>	<p><b>Why now?</b>          Thinking about how last years unit on different types of technology we are now beginning to think about how networks work together to keep us all connected.</p>	<p><b>Why now?</b>          Looking in more depth at how networks are connected to each other to make up the internet.           Beginning to understand that the WWW is content that is created by people.</p>	<p><b>Why now?</b>          Building on prior knowledge of networks thinking about how these are connected to systems within work environments that keep computers connected.</p>	<p><b>Why now?</b>          Building on what children know about networks, they now use what they know about systems and networks to help them understand how data is transferred across the internet.</p>
<p><b>Vocabulary progression</b>          technology, computer, mouse, trackpad, keyboard, screen, double-click, typing</p>	<p><b>Vocabulary progression</b>          Information technology (IT), computer, barcode, scanner/scan</p>	<p><b>Vocabulary progression</b>          digital device, input, process, output, program, digital, non-digital, connection, network, switch, server, wireless access point, cables, sockets</p>	<p><b>Vocabulary progression</b>          internet, network, router, security, switch, server, wireless access point (WAP), website, web page, web address, routing, web browser, World Wide Web, content, links, files, use, download, sharing, ownership, permission, information, accurate, honest, content, adverts</p>	<p><b>Vocabulary progression</b>          system, connection, digital, input, process, storage, output, search, search engine, refine, index, bot, ordering, links, algorithm, search engine optimisation (SEO), web crawler, content creator, selection, ranking</p>	<p><b>Vocabulary progression</b>          communication, protocol, data, address, Internet Protocol (IP), Domain Name Server (DNS), packet, header, data payload, chat, explore, slide deck, reuse, remix, collaboration, internet, public, private, one-way, two-way, one-to-one, one-to-many.</p>
<p><b>Links to Baildon Glen Curriculum Drivers</b></p> <ul style="list-style-type: none"> <li>Fresh experiences</li> <li>Possibilities</li> <li>Healthy Me (inc keeping safe)</li> <li>Equality and Diversity</li> </ul>	<p><b>Links to Baildon Glen Curriculum Drivers</b></p> <ul style="list-style-type: none"> <li>Fresh experiences</li> <li>Possibilities</li> <li>Healthy Me (inc keeping safe)</li> <li>Equality and Diversity</li> </ul>	<p><b>Links to Baildon Glen Curriculum Drivers</b></p> <ul style="list-style-type: none"> <li>Fresh experiences</li> <li>Possibilities</li> <li>Healthy Me (inc keeping safe)</li> <li>Equality and Diversity</li> </ul>	<p><b>Links to Baildon Glen Curriculum Drivers</b></p> <ul style="list-style-type: none"> <li>Fresh experiences</li> <li>Possibilities</li> <li>Healthy Me (inc keeping safe)</li> <li>Equality and Diversity</li> </ul>	<p><b>Links to Baildon Glen Curriculum Drivers</b></p> <ul style="list-style-type: none"> <li>Fresh experiences</li> <li>Possibilities</li> <li>Healthy Me (inc keeping safe)</li> <li>Equality and Diversity</li> </ul>	<p><b>Links to Baildon Glen Curriculum Drivers</b></p> <ul style="list-style-type: none"> <li>Fresh experiences</li> <li>Possibilities</li> <li>Healthy Me (inc keeping safe)</li> <li>Equality and Diversity</li> </ul>

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<b>AU2</b>	<p><b>Creating media – Digital painting</b></p> <p><b>NC:</b> (link to National Curriculum)</p> <p>4. use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> <p><b>Objectives:</b></p> <ul style="list-style-type: none"> <li>-To describe what different freehand tools do</li> <li>-To use the shape tool and the line tools</li> <li>-To make careful choices when painting a digital picture</li> <li>-To explain why I chose the tools I used</li> <li>-To use a computer on my own to paint a picture</li> <li>-To compare painting a picture on a computer and on paper</li> </ul>	<p><b>Creating media – Digital photography</b></p> <p><b>NC:</b> (link to National Curriculum)</p> <p>4. use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> <p>5. recognise common uses of information technology beyond school</p> <p>6. 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.</p> <p><b>Objectives:</b></p> <ul style="list-style-type: none"> <li>-To use a digital device to take a photograph</li> <li>-To make choices when taking a photograph</li> <li>-To describe what makes a good photograph</li> <li>-To decide how photographs can be improved</li> <li>-To use tools to change an image</li> <li>-To recognise that photos can be changed</li> </ul>	<p><b>Creating media - Stop-frame animation</b></p> <p><b>NC:</b> (link to National Curriculum)</p> <p>6. 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</p> <p>7. use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p> <p><b>Objectives:</b></p> <ul style="list-style-type: none"> <li>-To explain that animation is a sequence of drawings or photographs</li> <li>-To relate animated movement with a sequence of images</li> <li>-To plan an animation</li> <li>-To identify the need to work consistently and carefully</li> <li>-To review and improve an animation</li> <li>-To evaluate the impact of adding other media to an animation</li> </ul>	<p><b>Creating media - Audio production</b></p> <p><b>NC:</b> (link to National Curriculum)</p> <p>5. use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p> <p>6. 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</p> <p>7. use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p><b>Objectives:</b></p> <ul style="list-style-type: none"> <li>-To identify that sound can be recorded</li> <li>-To explain that audio recordings can be edited</li> <li>-To recognise the different parts of creating a podcast project</li> <li>-To apply audio editing skills independently</li> <li>-To combine audio to enhance my podcast project</li> <li>-To evaluate the effective use of audio</li> </ul>	<p><b>Creating media - Video production</b></p> <p><b>NC:</b> (link to National Curriculum)</p> <p>5. use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p> <p>6. 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</p> <p>7. use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p><b>Objectives:</b></p> <ul style="list-style-type: none"> <li>-To explain what makes a video effective</li> <li>-To identify digital devices that can record video</li> <li>-To capture video using a range of techniques</li> <li>-To create a storyboard</li> <li>-To identify that video can be improved through reshooting and editing</li> <li>-To consider the impact of the choices made when making and sharing a video</li> </ul>	<p><b>Creating media – Web page creation</b></p> <p><b>NC:</b> (link to National Curriculum)</p> <p>5. use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p> <p>6. 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</p> <p>7. use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p><b>Objectives:</b></p> <ul style="list-style-type: none"> <li>-To review an existing website and consider its structure</li> <li>-To plan the features of a web page</li> <li>-To consider the ownership and use of images (copyright)</li> <li>-To recognise the need to preview pages</li> <li>-To outline the need for a navigation path</li> <li>-To recognise the implications of linking to content owned by other people</li> </ul>
	<p><b>Why?</b></p> <p>Introducing digital drawings, using the shape tool and line tool.</p>	<p><b>Why?</b></p> <p>Taking pictures and knowing that different techniques can be used to improve the picture.</p>	<p><b>Why?</b></p> <p>Create an understanding of how animation works and that can be done using both photographs and drawings.</p>	<p><b>Why?</b></p> <p>Recognise that recordings can be edited to change how they sound.</p>	<p><b>Why?</b></p> <p>Digital devices can be used to record and edit videos.</p>	<p><b>Why?</b></p> <p><b>To build an understanding of how websites work and how they are created.</b></p>
	<p><b>Why now?</b></p> <p>Children start to understand what digital drawings are and how basic tools can be used to create an image.</p>	<p><b>Why now?</b></p> <p>Building on prior knowledge about digital drawings, children learn that pictures can be changed to improve the look of them.</p>	<p><b>Why now?</b></p> <p>Building on from last year children think about how we can take pictures of several images with slight changes to create an animation.</p>	<p><b>Why now?</b></p> <p>Building on from their prior knowledge from year 2 on how images can be edited, children learn about sound and how we can edit recordings to change how they sound.</p>	<p><b>Why now?</b></p> <p>Children will have previously learnt about how recordings can be edited to improve how they sound. In year 5 they learn about how we can edit videos using editing apps to change how they look using animations and text.</p>	<p><b>Why now?</b></p> <p>Using what children have learnt previously on how to edit images, videos and sound they now apply this to creating their own websites which include lots of editing and personalising.</p>
	<p><b>Vocabulary progression</b></p>	<p><b>Vocabulary progression</b></p>	<p><b>Vocabulary progression</b></p>	<p><b>Vocabulary progression</b></p>	<p><b>Vocabulary progression</b></p>	<p><b>Vocabulary progression</b></p>

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	paint program, tool, paintbrush, erase, fill, undo, shape tools, line tool, fill tool, undo tool, colour, brush style, brush size, pictures, painting, computers	device, camera, photograph, capture, image, digital, landscape, portrait, framing, subject, compose, light sources, flash, focus, background, editing, filter, format, framing, lighting,	animation, flip book, stop-frame, frame, sequence, image, photograph, setting, character, events, onion skinning, consistency, evaluation, delete, media, import, transition.	audio, microphone, speaker, headphones, input device, output device, sound, podcast, edit, trim, align, layer, import, record, playback, selection, load, save, export, MP3, evaluate, feedback.	video, audio, camera, talking head, panning, close up, video camera, microphone, lens, mid-range, long shot, moving subject, side by side, angle (high, low, normal), static, zoom, pan, tilt, storyboard, filming, review, import, split, trim, clip, edit, reshoot, delete, reorder, export, evaluate, share.	website, web page, browser, media, Hypertext Markup Language (HTML), logo, layout, header, media, purpose, copyright, fair use, home page, preview, evaluate, device, Google Sites, breadcrumb trail, navigation, hyperlink, subpage, evaluate, implication, external link, embed.
	<p><b>Links to Baildon Glen Curriculum Drivers</b></p> <ul style="list-style-type: none"> <li>• Fresh experiences</li> <li>• Possibilities</li> <li>• Healthy Me (inc keeping safe)</li> <li>• Equality and Diversity</li> </ul>	<p><b>Links to Baildon Glen Curriculum Drivers</b></p> <ul style="list-style-type: none"> <li>• Fresh experiences</li> <li>• Possibilities</li> <li>• Healthy Me (inc keeping safe)</li> <li>• Equality and Diversity</li> </ul>	<p><b>Links to Baildon Glen Curriculum Drivers</b></p> <ul style="list-style-type: none"> <li>• Fresh experiences</li> <li>• Possibilities</li> <li>• Healthy Me (inc keeping safe)</li> <li>• Equality and Diversity</li> </ul>	<p><b>Links to Baildon Glen Curriculum Drivers</b></p> <ul style="list-style-type: none"> <li>• Fresh experiences</li> <li>• Possibilities</li> <li>• Healthy Me (inc keeping safe)</li> <li>• Equality and Diversity</li> </ul>	<p><b>Links to Baildon Glen Curriculum Drivers</b></p> <ul style="list-style-type: none"> <li>• Fresh experiences</li> <li>• Possibilities</li> <li>• Healthy Me (inc keeping safe)</li> <li>• Equality and Diversity</li> </ul>	<p><b>Links to Baildon Glen Curriculum Drivers</b></p> <ul style="list-style-type: none"> <li>• Fresh experiences</li> <li>• Possibilities</li> <li>• Healthy Me (inc keeping safe)</li> <li>• Equality and Diversity</li> </ul>
<b>SP1</b>	<p><b>Programming A – Moving a robot</b></p> <p><b>NC:</b> (link to National Curriculum) 1. understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions 2. create and debug simple programs 3. use logical reasoning to predict the behaviour of simple programs 5. recognise common uses of information technology beyond school</p> <p><b>Objectives:</b> -To explain what a given command will do -To act out a given word -To combine forwards and backwards commands to make a sequence -To combine four direction commands to make sequences -To plan a simple program -To find more than one solution to a problem</p>	<p><b>Programming A – Robot algorithms</b></p> <p><b>NC:</b> (link to National Curriculum) 1. understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions 2. create and debug simple programs 3. use logical reasoning to predict the behaviour of simple programs 4. use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> <p><b>Objectives:</b> -To describe a series of instructions as a sequence -To explain what happens when we change the order of instructions -To use logical reasoning to predict the outcome of a program -To explain that programming projects can have code and artwork -To design an algorithm -To create and debug a program that I have written</p>	<p><b>Programming A - Sequencing sounds</b></p> <p><b>NC:</b> (link to National Curriculum) 1. design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts 2. use sequence, selection, and repetition in programs; work with variables and various forms of input and output 3. use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs 6. 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</p> <p><b>Objectives:</b> -To explore a new programming environment -To identify that commands have an outcome -To explain that a program has a start -To recognise that a sequence of commands can have an order -To change the appearance of my project</p>	<p><b>Programming A – Repetition in shapes</b></p> <p><b>NC:</b> (link to National Curriculum) 1. design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts 2. use sequence, selection, and repetition in programs; work with variables and various forms of input and output 3. use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs 6. 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</p> <p><b>Objectives:</b> -To identify that accuracy in programming is important -To create a program in a text-based language -To explain what 'repeat' means -To modify a count-controlled loop to produce a given outcome -To decompose a task into small steps</p>	<p><b>Programming A – Selection in physical computing</b></p> <p><b>NC:</b> (link to National Curriculum) 1. design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts 2. use sequence, selection, and repetition in programs; work with variables and various forms of input and output 3. use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs 6. 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</p> <p><b>Objectives:</b> -To control a simple circuit connected to a computer -To write a program that includes count-controlled loops -To explain that a loop can stop when a condition is met -To explain that a loop can be used to repeatedly check whether a condition has been met -To design a physical project that includes selection</p>	<p><b>Programming A – Variables in games</b></p> <p><b>NC:</b> (link to National Curriculum) 1. design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts 2. use sequence, selection, and repetition in programs; work with variables and various forms of input and output 3. use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs 6. 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</p> <p><b>Objectives:</b> -To define a 'variable' as something that is changeable -To explain why a variable is used in a program -To choose how to improve a game by using variables -To design a project that builds on a given example</p>

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			-To create a project from a task description	-To create a program that uses count-controlled loops to produce a given outcome	-To create a program that controls a physical computing project	-To use my design to create a project -To evaluate my project
	<b>Why?</b> Understanding of coding and how it works.	<b>Why?</b> Know that programming can be used to create artwork and know that we can write algorithms which tell the Beebot what to do.	<b>Why?</b> Know what commands are and that when a command is given there will be an outcome.	<b>Why?</b> Think about how different codes can be used to simplify algorithms. Children learn different ways of creating easier codes using commands like 'REPEAT' and 'FOREVER'.	<b>Why?</b> Using coding to program microbits.	<b>Why?</b> Introduce variables and how these can be used when creating a game.
	<b>Why now?</b> Children to have a simple understanding of code. Know that when we input a simple code into the Beebot it will do as we say.	<b>Why now?</b> Children use their prior knowledge of coding to be able to make predictions and begin to write their own algorithms.	<b>Why now?</b> Building on from last year children use what they learnt about algorithms to create commands on an online programming app.	<b>Why now?</b> Start to use text as codes on turtle academy to create more complex codes.	<b>Why now?</b> Using what the children have previously learnt about algorithms they program microbits to create badges with names on them.	<b>Why now?</b> Children use what they have learnt previously to create games using variables, which incorporates more complex coding skills.
	<b>Vocabulary progression</b> Bee-Bot, forwards, backwards, turn, clear, go, commands, instructions, directions, left, right, route, plan, algorithm, program.	<b>Vocabulary progression</b> instruction, sequence, clear, unambiguous, algorithm, program, order, prediction, artwork, design, route, mat, debugging, decomposition	<b>Vocabulary progression</b> Scratch, programming, blocks, commands, code, sprite, costume, stage, backdrop, motion, turn, point in direction, go to, glide, sequence, event, task, design, run the code, order, note, chord, algorithm, bug, debug, code.	<b>Vocabulary progression</b> Logo (programming environment), program, turtle, commands, code snippet, algorithm, design, debug, pattern, repeat, repetition, count-controlled loop, value, trace, decompose, procedure.	<b>Vocabulary progression</b> microcontroller, USB, components, connection, infinite loop, output component, motor, repetition, count-controlled loop, Crumble controller, switch, LED, Sparkle, crocodile clips, connect, battery box, program, condition, Input, output, selection, action, debug, circuit, power, cell, buzzer	<b>Vocabulary progression</b> variable, change, name, value, set, design, event, algorithm, code, task, artwork, program, project, code, test, debug, improve, evaluate, share, assign, declare
	<b>Links to Baildon Glen Curriculum Drivers</b> <ul style="list-style-type: none"> <li>Fresh experiences</li> <li>Possibilities</li> <li>Healthy Me (inc keeping safe)</li> <li>Equality and Diversity</li> </ul>	<b>Links to Baildon Glen Curriculum Drivers</b> <ul style="list-style-type: none"> <li>Fresh experiences</li> <li>Possibilities</li> <li>Healthy Me (inc keeping safe)</li> <li>Equality and Diversity</li> </ul>	<b>Links to Baildon Glen Curriculum Drivers</b> <ul style="list-style-type: none"> <li>Fresh experiences</li> <li>Possibilities</li> <li>Healthy Me (inc keeping safe)</li> <li>Equality and Diversity</li> </ul>	<b>Links to Baildon Glen Curriculum Drivers</b> <ul style="list-style-type: none"> <li>Fresh experiences</li> <li>Possibilities</li> <li>Healthy Me (inc keeping safe)</li> <li>Equality and Diversity</li> </ul>	<b>Links to Baildon Glen Curriculum Drivers</b> <ul style="list-style-type: none"> <li>Fresh experiences</li> <li>Possibilities</li> <li>Healthy Me (inc keeping safe)</li> <li>Equality and Diversity</li> </ul>	<b>Links to Baildon Glen Curriculum Drivers</b> <ul style="list-style-type: none"> <li>Fresh experiences</li> <li>Possibilities</li> <li>Healthy Me (inc keeping safe)</li> <li>Equality and Diversity</li> </ul>
<b>SP2</b>	<b>Data and information – Grouping data</b>  <b>NC:</b> (link to National Curriculum) 4. use technology purposefully to create, organise, store, manipulate and retrieve digital content 6. 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.  <b>Objectives:</b> -To label objects	<b>Data and information – Pictograms</b>  <b>NC:</b> (link to National Curriculum) 4. use technology purposefully to create, organise, store, manipulate and retrieve digital content 6. 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.  <b>Objectives:</b>	<b>Data and information – Branching databases</b>  <b>NC:</b> (link to National Curriculum) 6. 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  <b>Objectives:</b> -To create questions with yes/no answers -To identify the attributes needed to collect data about an object	<b>Data and information – Data logging</b>  <b>NC:</b> (link to National Curriculum) 2. use sequence, selection, and repetition in programs; work with variables and various forms of input and output 6. 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  <b>Objectives:</b>	<b>Data and information – Flat-file databases</b>  <b>NC:</b> (link to National Curriculum) 5. use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content 6. 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  <b>Objectives:</b>	<b>Data and information – Spreadsheets</b>  <b>NC:</b> (link to National Curriculum) 6. 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  <b>Objectives:</b> -To create a data set in a spreadsheet -To build a data set in a spreadsheet

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	-To identify that objects can be counted -To describe objects in different ways -To count objects with the same properties -To compare groups of objects -To answer questions about groups of objects	-To recognise that we can count and compare objects using tally charts -To recognise that objects can be represented as pictures -To create a pictogram -To select objects by attribute and make comparisons -To recognise that people can be described by attributes -To explain that we can present information using a computer	-To create a branching database -To explain why it is helpful for a database to be well structured -To plan the structure of a branching database -To independently create an identification tool	-To explain that data gathered over time can be used to answer questions -To use a digital device to collect data automatically -To explain that a data logger collects 'data points' from sensors over time -To recognise how a computer can help us analyse data -To identify the data needed to answer questions " -To use data from sensors to answer questions "	-To use a form to record information -To compare paper and computer-based databases -To outline how you can answer questions by grouping and then sorting data -To explain that tools can be used to select specific data -To explain that computer programs can be used to compare data visually -To use a real-world database to answer questions	-To explain that formulas can be used to produce calculated data -To apply formulas to data -To create a spreadsheet to plan an event -To choose suitable ways to present data
	<b>Why?</b> To build an understanding of simple grouping	<b>Why?</b> Introduce tally charts online.	<b>Why?</b> Know what a branching database is and how it works to store data and information.	<b>Why?</b> Know that data loggers can be used to collect information.	<b>Why?</b> To have an understanding of different ways of reading data that has been collected online.	<b>Why?</b> To be able to used a spreadsheet to sort data.
	<b>Why now?</b> To understand what grouping is and know that computers can help us group things.	<b>Why now?</b> Using their previous knowledge of grouping, children now begin to look at how we can display this information on a computing. E.g. a tally chart.	<b>Why now?</b> Following on from using tally charts children now begin to use branching databases to display data on a computer. Children learn about how information is sorted.	<b>Why now?</b> Children now collect and use more complex and real-life data. Using data loggers to collect our own data and displaying it on a computer.	<b>Why now?</b> Using their prior knowledge of data and how it can be collected and stored online, children now look at different ways of reading data that has been collected online.	<b>Why now?</b> Children now learn how to use a spreadsheet to sort their own data into an online database using formulas, using a range of skills and more complex data.
	<b>Vocabulary progression</b> object, label, group, search, image, property, colour, size, shape, value, data set, more, less, most, fewest, least, the same	<b>Vocabulary progression</b> more than, less than, most, least, common, popular, organise, data, object, tally chart, votes, total, pictogram, enter, data, compare, objects, count, explain, attribute, group, same, different, conclusion, block diagram, sharing	<b>Vocabulary progression</b> attribute, value, questions, table, objects, branching, database, objects, equal, even, separate, structure, compare, order, organise, selecting, information, decision tree.	<b>Vocabulary progression</b> data, table, layout, input device, sensor, logger, logging, data point, interval, analyse, dataset, import, export, logged, collection, review, conclusion.	<b>Vocabulary progression</b> database, data, information, record, field, sort, order, group, search, value, criteria, graph, chart, axis, compare, filter, presentation.	<b>Vocabulary progression</b> data, collecting, table, structure, spreadsheet, cell, cell reference, data item, format, formula, calculation, spreadsheet, input, output, operation, range, duplicate, sigma, propose, question, data set, organised, chart, evaluate, results, sum, comparison, software, tools.
	<b>Links to Baildon Glen Curriculum Drivers</b> <ul style="list-style-type: none"> <li>Fresh experiences</li> <li>Possibilities</li> <li>Healthy Me (inc keeping safe)</li> <li>Equality and Diversity</li> </ul>	<b>Links to Baildon Glen Curriculum Drivers</b> <ul style="list-style-type: none"> <li>Fresh experiences</li> <li>Possibilities</li> <li>Healthy Me (inc keeping safe)</li> <li>Equality and Diversity</li> </ul>	<b>Links to Baildon Glen Curriculum Drivers</b> <ul style="list-style-type: none"> <li>Fresh experiences</li> <li>Possibilities</li> <li>Healthy Me (inc keeping safe)</li> <li>Equality and Diversity</li> </ul>	<b>Links to Baildon Glen Curriculum Drivers</b> <ul style="list-style-type: none"> <li>Fresh experiences</li> <li>Possibilities</li> <li>Healthy Me (inc keeping safe)</li> <li>Equality and Diversity</li> </ul>	<b>Links to Baildon Glen Curriculum Drivers</b> <ul style="list-style-type: none"> <li>Fresh experiences</li> <li>Possibilities</li> <li>Healthy Me (inc keeping safe)</li> <li>Equality and Diversity</li> </ul>	<b>Links to Baildon Glen Curriculum Drivers</b> <ul style="list-style-type: none"> <li>Fresh experiences</li> <li>Possibilities</li> <li>Healthy Me (inc keeping safe)</li> <li>Equality and Diversity</li> </ul>
<b>SU1</b>	<b>Creating media – Digital writing</b>  <b>NC:</b> (link to National Curriculum) 4. use technology purposefully to create, organise, store, manipulate and retrieve digital content 6. use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have	<b>Creating media - Digital music</b>  <b>NC</b> (link to national curriculum) 4. use technology purposefully to create, organise, store, manipulate and retrieve digital content  <b>Objectives</b> -To say how music can make us feel	<b>Creating media – Desktop publishing</b>  <b>NC:</b> (link to National Curriculum) 5. use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content 6. select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a	<b>Creating media – Photo editing</b>  <b>NC:</b> (link to National Curriculum) 6. 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	<b>Creating media – Introduction to vector graphics</b>  <b>NC:</b> (link to National Curriculum) 6. 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	<b>Creating media – 3D Modelling</b>  <b>NC:</b> (link to National Curriculum) 6. 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

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<p>concerns about content or contact on the internet or other online technologies.</p> <p><b>Objectives:</b></p> <ul style="list-style-type: none"> <li>-To use a computer to write</li> <li>-To add and remove text on a computer</li> <li>-To identify that the look of text can be changed on a computer</li> <li>-To make careful choices when changing text</li> <li>-To explain why I used the tools that I chose</li> <li>-To compare typing on a computer to writing on paper</li> </ul>	<p>-To identify that there are patterns in music</p> <p>-To experiment with sound using a computer</p> <p>-To use a computer to create a musical pattern</p> <p>-To create music for a purpose</p> <p>-To review and refine our computer work</p>	<p>range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p> <p><b>Objectives:</b></p> <ul style="list-style-type: none"> <li>-To recognise how text and images convey information</li> <li>-To recognise that text and layout can be edited</li> <li>-To choose appropriate page settings</li> <li>-To add content to a desktop publishing publication</li> <li>-To consider how different layouts can suit different purposes</li> <li>-To consider the benefits of desktop publishing</li> </ul>	<p>7. use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p><b>Objectives:</b></p> <ul style="list-style-type: none"> <li>-To explain that the composition of digital images can be changed</li> <li>-To explain that colours can be changed in digital images</li> <li>-To explain how cloning can be used in photo editing</li> <li>-To explain that images can be combined</li> <li>-To combine images for a purpose</li> <li>-To evaluate how changes can improve an image</li> </ul>	<p>7. use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p><b>Objectives</b></p> <ul style="list-style-type: none"> <li>-To identify that drawing tools can be used to produce different outcomes</li> <li>-To create a vector drawing by combining shapes</li> <li>-To use tools to achieve a desired effect</li> <li>-To recognise that vector drawings consist of layers</li> <li>-To group objects to make them easier to work with</li> <li>-To apply what I have learned about vector drawings</li> </ul>	<p>7. use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p><b>Objectives</b></p> <ul style="list-style-type: none"> <li>-To recognise that you can work in three dimensions on a computer</li> <li>-To identify that digital 3D objects can be modified</li> <li>-To recognise that objects can be combined in a 3D model</li> <li>-To create a 3D model for a given purpose</li> <li>-To plan my own 3D model</li> <li>-To create my own digital 3D model</li> </ul>
<p><b>Why?</b></p> <p>Understand how to type onto a computer.</p>	<p><b>Why?</b></p> <p>Know that we can use computers to make music</p>	<p><b>Why?</b></p> <p>Know that we can use computers to edit the layout and text, to make it better suited to its purpose.</p>	<p><b>Why?</b></p> <p>Know that images can be edited online to change how we think and feel about them.</p>	<p><b>Why?</b></p> <p>Know that shapes can be combined to create images called vector drawings.</p>	<p><b>Why?</b></p> <p>Know that we can create 3D models on a computer.</p>
<p><b>Why now?</b></p> <p>Build a strong foundation of knowledge on how to use a keyboard to type.</p>	<p><b>Why now?</b></p> <p>Children learn that computers can be used to not just for typing but for a range of other activities too, like making music.</p>	<p><b>Why now?</b></p> <p>Use what they learnt about typing in year 1 and combine this with inserting images and thinking about layout of pages and how this can be edited</p>	<p><b>Why now?</b></p> <p>Building on from their prior knowledge of editing text (size, font and colour), children now begin to think about how images can be edited using 'filters, crop, zoom and duplicating tools.</p>	<p><b>Why now?</b></p> <p>Children use what they previously learn in year 1 Autumn 1 about creating shapes online and begin to use shapes to create vector drawings by layering different shapes.</p>	<p><b>Why now?</b></p> <p>Children use their knowledge of vector drawings and apply this to create 3D models, a more complex task</p>
<p><b>Vocabulary progression</b></p> <p>word processor, keyboard, keys, letters, type, numbers, space, backspace, text cursor, capital letters, toolbar, bold, italic, underline, mouse, select, font, undo, redo, format, compare, typing, writing</p>	<p><b>Vocabulary progression</b></p> <p>music, quiet, loud, feelings, emotions, pattern, rhythm, pulse, pitch, tempo, rhythm, notes, create, emotion, beat, instrument, open, edit.</p>	<p><b>Vocabulary progression</b></p> <p>text, images, advantages, disadvantages, communicate, font, style, landscape, portrait, orientation, placeholder, template, layout, content, desktop publishing, copy, paste, purpose, benefits.</p>	<p><b>Vocabulary progression</b></p> <p>image, edit, digital, crop, rotate, undo, save, adjustments, effects, colours, hue, saturation, sepia, vignette, image, retouch, clone, select, combine, made up, real, composite, cut, copy, paste, alter, background, foreground, zoom, undo, font.</p>	<p><b>Vocabulary progression</b></p> <p>vector, drawing tools, object, toolbar, vector drawing, move, resize, colour, rotate, duplicate/copy, zoom, select, align, modify, layers, order, copy, paste, group, ungroup, reuse, reflection</p>	<p><b>Vocabulary progression</b></p> <p>TinkerCAD, 2D, 3D, shapes, select, move, perspective, view, handles, resize, lift, lower, recolour, rotate, duplicate, group, cylinder, cube, cuboid, sphere, cone, prism, pyramid, placeholder, hollow, choose, combine, construct, evaluate, modify.</p>
<p><b>Links to Baildon Glen Curriculum Drivers</b></p> <ul style="list-style-type: none"> <li>• Fresh experiences</li> <li>• Possibilities</li> <li>• Healthy Me (inc keeping safe)</li> <li>• Equality and Diversity</li> </ul>	<p><b>Links to Baildon Glen Curriculum Drivers</b></p> <ul style="list-style-type: none"> <li>• Fresh experiences</li> <li>• Possibilities</li> <li>• Healthy Me (inc keeping safe)</li> <li>• Equality and Diversity</li> </ul>	<p><b>Links to Baildon Glen Curriculum Drivers</b></p> <ul style="list-style-type: none"> <li>• Fresh experiences</li> <li>• Possibilities</li> <li>• Healthy Me (inc keeping safe)</li> <li>• Equality and Diversity</li> </ul>	<p><b>Links to Baildon Glen Curriculum Drivers</b></p> <ul style="list-style-type: none"> <li>• Fresh experiences</li> <li>• Possibilities</li> <li>• Healthy Me (inc keeping safe)</li> <li>• Equality and Diversity</li> </ul>	<p><b>Links to Baildon Glen Curriculum Drivers</b></p> <ul style="list-style-type: none"> <li>• Fresh experiences</li> <li>• Possibilities</li> <li>• Healthy Me (inc keeping safe)</li> <li>• Equality and Diversity</li> </ul>	<p><b>Links to Baildon Glen Curriculum Drivers</b></p> <ul style="list-style-type: none"> <li>• Fresh experiences</li> <li>• Possibilities</li> <li>• Healthy Me (inc keeping safe)</li> <li>• Equality and Diversity</li> </ul>

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	<b>Programming B - Programming animations</b>	<b>Programming B - Programming quizzes</b>	<b>Programming B - Events and actions in programs</b>	<b>Programming B – Repetition in games</b>	<b>Programming B – Selection in quizzes</b>	<b>Programming B - Sensing movement</b>	
<b>SU2</b>	<p><b>NC:</b> (link to National Curriculum)</p> <ol style="list-style-type: none"> <li>understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</li> <li>create and debug simple programs</li> <li>use logical reasoning to predict the behaviour of simple programs</li> <li>use technology purposefully to create, organise, store, manipulate and retrieve digital content</li> </ol> <p><b>Objectives:</b></p> <ul style="list-style-type: none"> <li>-To choose a command for a given purpose</li> <li>-To show that a series of commands can be joined together</li> <li>-To identify the effect of changing a value</li> <li>-To explain that each sprite has its own instructions</li> <li>-To design the parts of a project</li> <li>-To use my algorithm to create a program</li> </ul>	<p><b>NC:</b> (link to National Curriculum)</p> <ol style="list-style-type: none"> <li>understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</li> <li>create and debug simple programs</li> <li>use logical reasoning to predict the behaviour of simple programs</li> </ol> <p><b>Objectives:</b></p> <ul style="list-style-type: none"> <li>-To explain that a sequence of commands has a start</li> <li>-To explain that a sequence of commands has an outcome</li> <li>-To create a program using a given design</li> <li>-To change a given design</li> <li>-To create a program using my own design</li> <li>-To decide how my project can be improved</li> </ul>	<p><b>NC:</b> (link to National Curriculum)</p> <ol style="list-style-type: none"> <li>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> <li>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> <li>use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</li> </ol> <p><b>Objectives:</b></p> <ul style="list-style-type: none"> <li>-To explain how a sprite moves in an existing project</li> <li>-To create a program to move a sprite in four directions</li> <li>-To adapt a program to a new context</li> <li>-To develop my program by adding features</li> <li>-To identify and fix bugs in a program</li> <li>-To design and create a maze-based challenge</li> </ul>	<p><b>NC:</b> (link to National Curriculum)</p> <ol style="list-style-type: none"> <li>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> <li>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> <li>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</li> </ol> <p><b>Objectives:</b></p> <ul style="list-style-type: none"> <li>-To develop the use of count-controlled loops in a different programming environment</li> <li>-To explain that in programming there are infinite loops and count controlled loops</li> <li>-To develop a design that includes two or more loops which run at the same time</li> <li>-To modify an infinite loop in a given program</li> <li>-To design a project that includes repetition</li> <li>-To create a project that includes repetition</li> </ul>	<p><b>NC:</b> (link to National Curriculum)</p> <ol style="list-style-type: none"> <li>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> <li>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> <li>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</li> </ol> <p><b>Objectives:</b></p> <ul style="list-style-type: none"> <li>-To explain how selection is used in computer programs</li> <li>-To relate that a conditional statement connects a condition to an outcome</li> <li>-To explain how selection directs the flow of a program</li> <li>-To design a program which uses selection</li> <li>-To create a program which uses selection</li> <li>-To evaluate my program</li> </ul>	<p><b>NC:</b> (link to National Curriculum)</p> <ol style="list-style-type: none"> <li>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> <li>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> <li>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</li> </ol> <p><b>Objectives:</b></p> <ul style="list-style-type: none"> <li>-To create a program to run on a controllable device</li> <li>-To explain that selection can control the flow of a program</li> <li>-To update a variable with a user input</li> <li>-To use a conditional statement to compare a variable to a value</li> <li>-To design a project that uses inputs and outputs on a controllable device</li> <li>-To develop a program to use inputs and outputs on a controllable device</li> </ul>	
	<b>Why?</b>	Know what a command is and know how to create a program using and algorithm.	Know that you can create a program using a sequence of commands.	Know how to move a sprite on scratch and know how to fix bugs.	Know what a loop is and know that we can create projects that include repetition.	Know what selection is in a computer program and how it can be used in programming.	To be able to use variables to create codes for a microbits.
	<b>Why now?</b>	Children get an understanding of what and algorithm is and how it can be used to create a program.	Build on knowledge of commands from last year children now begin to create their own programs.	Children use what they have learnt previously to program sprites to be able to move in different ways using blocks like 'forever' and 'always'. Children also learn that sometimes we algorithms don't work, and we may need to fix bugs using different codes.	Children to build on prior knowledge of creating programs to now using loops and creating more complex programs which include more than one sprite being programmed at the same time.	Using selection in programming to upskill and make programs which flow well.	To use what they have learnt previously about programming and coding to be able to code a microbit. Children learnt about microbits in year 5 this year they will learn more complex coding such as a tracker to track the

# Computing Whole School Overview

					number of steps someone might take.
<b>Vocabulary progression</b> Scratch Jr, command, sprite, compare, programming, area, block, joining, start, run, program, background, delete, reset, algorithm, predict, effect, change, value, instructions, design.	<b>Vocabulary progression</b> sequence, command, program, run, start, outcome, predict, blocks, design, actions, sprite, project, modify, change, algorithm, build, match, compare, debug, features, evaluate, decomposition, code.	<b>Vocabulary progression</b> motion, event, sprite, algorithm, logic, move, resize, extension block, pen up, set up, pen, design, action, debugging, errors, setup, code, test, debug, actions.	<b>Vocabulary progression</b> Scratch, programming, sprite, blocks, code, loop, repeat, value, infinite loop, count-controlled loop, costume, repetition, forever, animate, event block, duplicate, modify, design, algorithm, debug, refine, evaluate.	<b>Vocabulary progression</b> Selection, condition, true, false, count-controlled loop, outcomes, conditional statement, algorithm, program, debug, question, answer, task, design, input, implement, test, run, setup, operator	<b>Vocabulary progression</b> Micro:bit, MakeCode, input, process, output, flashing, USB, trace, selection, condition, if then else, variable, random, sensing, accelerometer, value, compass, direction, navigation, design, task, algorithm, step counter, plan, create, code, test, debug.
<b>Links to Baildon Glen Curriculum Drivers</b> <ul style="list-style-type: none"> <li>Fresh experiences</li> <li>Possibilities</li> <li>Healthy Me (inc keeping safe)</li> <li>Equality and Diversity</li> </ul>	<b>Links to Baildon Glen Curriculum Drivers</b> <ul style="list-style-type: none"> <li>Fresh experiences</li> <li>Possibilities</li> <li>Healthy Me (inc keeping safe)</li> <li>Equality and Diversity</li> </ul>	<b>Links to Baildon Glen Curriculum Drivers</b> <ul style="list-style-type: none"> <li>Fresh experiences</li> <li>Possibilities</li> <li>Healthy Me (inc keeping safe)</li> <li>Equality and Diversity</li> </ul>	<b>Links to Baildon Glen Curriculum Drivers</b> <ul style="list-style-type: none"> <li>Fresh experiences</li> <li>Possibilities</li> <li>Healthy Me (inc keeping safe)</li> <li>Equality and Diversity</li> </ul>	<b>Links to Baildon Glen Curriculum Drivers</b> <ul style="list-style-type: none"> <li>Fresh experiences</li> <li>Possibilities</li> <li>Healthy Me (inc keeping safe)</li> <li>Equality and Diversity</li> </ul>	<b>Links to Baildon Glen Curriculum Drivers</b> <ul style="list-style-type: none"> <li>Fresh experiences</li> <li>Possibilities</li> <li>Healthy Me (inc keeping safe)</li> <li>Equality and Diversity</li> </ul>