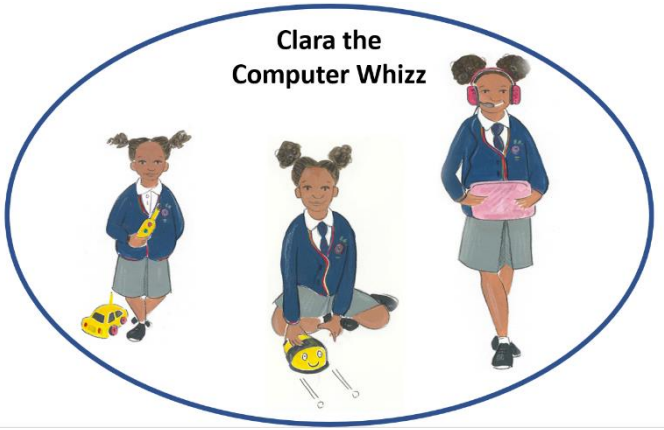
Computing

Long Term Curriculum Map

Whole School Scheme of Learning



Intent - Why our Computing curriculum looks like this?

At Barley Fields, we know that computing and digital technology is going to play a pivotal role in our children's lives and as a result we aim to develop 'thinkers of the future'. We aim for our children to be digital creators rather than just consumers when using technology and to equip them to navigate the rapid and extraordinary changes taking place in digital technology effectively and safely.

Our curriculum, encompassing computer science, information technology, digital literacy and online safety, is progressive, ambitious and carefully sequenced. Children know that they need to face and overcome challenge in computing lessons; they accept that they will fail, will need to persevere and develop skills as logical, computational thinkers. We offer children access to a wide range of software, platforms and devices to help them, using technology as a tool for both creativity and learning. We want our children to be active participants in the digital world, whilst ensuring they are respectful, responsible and confident users; children will constantly be made aware of measures they can take to keep themselves, and others, safe online. As a school we utilise technology (including social media) to model positive use; we recognise that the most effective prevention for issues regarding technology is education. Our curriculum is knowledge rich but also provides the children chance to apply their computing skills which will, in turn, allow children the opportunity to become budding computer scientists.

Implementation - How will we achieve this?

Our children follow a carefully structured Computing curriculum which has been designed to ensure children know more, do more and remember more as they progress through our school. Our content is supported by advice, requirements and guidelines presented in the National Curriculum and the Teach Computing scheme built by The NCCE (The National Centre for Computing Education). Our curriculum is built around three strands of learning:

Computer Science	**Information Technology**	**Digital Literacy and Online Safety**
The understanding of coding and programming across a range of physical devices and digital resources. Investigating how computers work and networks connected.	The range of skills required to operate and manipulate specific programs, systems, and content. *Including desktop publishing, creating media and data handling.*	The knowledge required to use technology safely and to evaluate and react to any potential risks of the online/digital world.

Our Teaching Approach

Computing is taught weekly or in blocks of lessons to ensure children have opportunities for a sustained period of study and have time to embed and enhance their learning. Detailed medium-term planning supports teaching, ensures continuity and carefully plans for progression and depth. Children have opportunities to use high quality resources and materials to support their learning. The medium-term planning also underpins an appropriate teaching pedagogy for effective quality first teaching in computing.

1. **Unplug and Unpack -** Teach new concepts first by unpacking complex terms and ideas in unplugged and familiar contexts. In these sessions, when appropriate, teachers should support children in the acquisition of knowledge through the use of key concepts, terms and vocabulary. Experiences in this stage should be hands-on and provide tactile and sensory experiences to enhance learning. Regular recall and revision of vocabulary should be incorporated into all sessions once learned. Units begin by exploring declarative or conceptual knowledge.

2. **Repack -** Repack new understanding back into the original concept- linked to the computing lesson. This approach (semantic waves) can help children develop a secure understanding of complex concepts. Units are enhanced by exploring declarative or conceptual knowledge.

3. **Tinker/Edit/Model** - Teachers encourage collaboration in the classroom; a growth mindset is promoted . This is the shared experience in which children are encouraged to discover for themselves, paired with worked examples and modelling/scaffolding for those who need it. In this session, formative assessment is used to identify where to support, model or challenge. Activities/tasks range from highly structured to exploratory. Adapting instruction to achieve different objectives will help to keep children engaged whilst encouraging greater independence and success for all. In this step children are finding or being shown the procedural knowledge that they need.

4. **Exploratory Tasks/Projects -** Threaded within the curriculum are a range of exploratory tasks and projects which encourage children to apply their learning in a range of contexts whilst making connections with other learning experiences. It also provides children with the opportunity to apply and consolidate their knowledge and understanding. Projects should demonstrate how learning can be transferred into real life scenarios.

All units are taught in conjunction with the Education For A Connected World document and resources to support the teaching of these objectives and expectations can be found at https://projectevolve.co.uk/. The objectives taken from this are threaded throughout our curriculum and regularly revisited and built upon further.

Our computing curriculum is inclusive for all children; each lesson is sequenced so that it builds on the learning from the previous session. Where appropriate, activities are scaffolded so that all children can succeed, children may be provided with extra resources and support, such as visual prompts, so that they can reach the same learning goals as the rest of the class. At times, Explorer Tasks are incorporated into sessions which are a more open-ended extension task for more-skilled learners.

Self-image and identity

This strand explores the differences between online and offline identity beginning with self-awareness, shaping online identities and how media impacts on gender and stereotypes. It identifies effective routes for reporting and support and explores the impact of online technologies on self-image and behaviour.

Online relationships

This strand explores how technology shapes communication styles and identifies strategies for positive relationships in online communities. It offers opportunities to discuss relationships and behaviours that may lead to harm and how positive online interaction can empower and amplify voice.

Online reputation

This strand explores the concept of reputation and how others may use online information to make judgements. It offers opportunities to develop strategies to manage personal digital content effectively and capitalise on technology's capacity to create effective positive profiles.

Online bullying

This strand explores bullying and other online aggression and how technology impacts those issues. It offers strategies for effective reporting and intervention and considers how bullying and other aggressive behaviour relates to legislation.

Managing online information

This strand explores how online information is found, viewed and interpreted. It offers strategies for effective searching, critical evaluation and ethical publishing.

Health, well-being and lifestyle

This strand explores the impact that technology has on health, well-being and lifestyle. It also includes understanding negative behaviours and issues amplified and sustained by online technologies and the strategies for dealing with them.

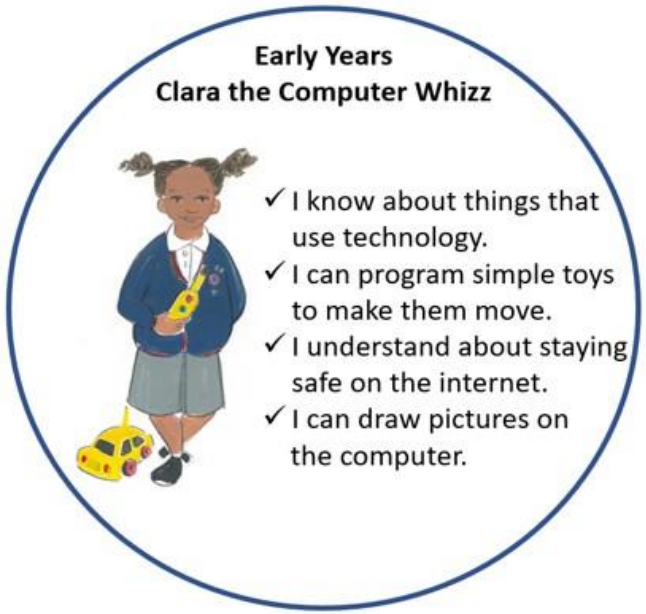
Privacy and security

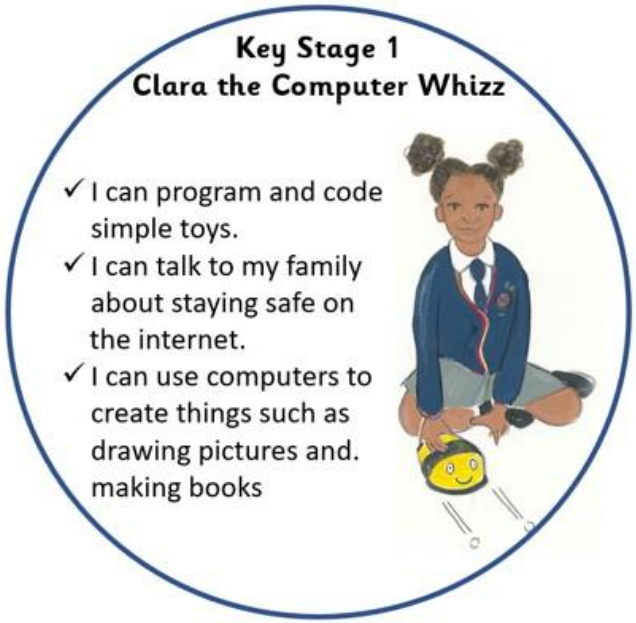
This strand explores how personal online information can be used, stored, processed and shared. It offers both behavioural and technical strategies to limit impact on privacy and protect data and systems against compromise.

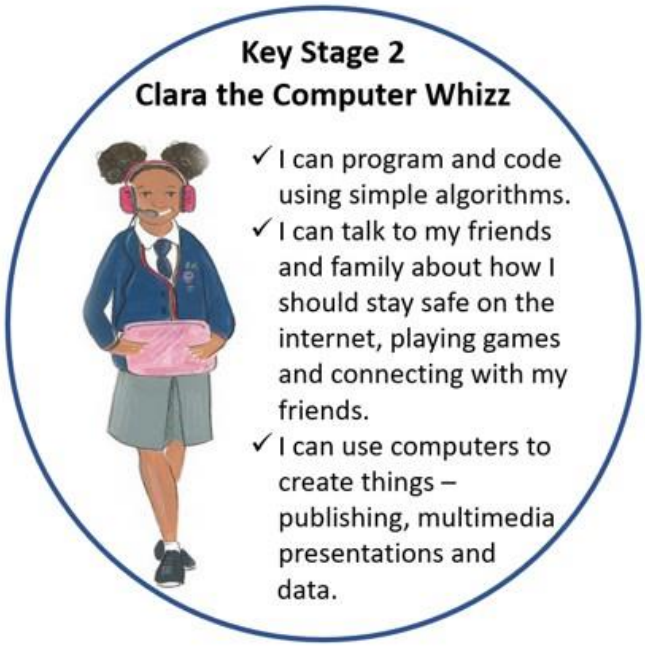
Copyright and ownership

This strand explores the concept of ownership of online content. It explores strategies for protecting personal content and crediting the rights of others as well as addressing potential consequences of illegal access, download and distribution.

Our children understand the core skills needed to learn in Computing with the use of the school curriculum character – Clara the Computer Whizz. This character is regularly used to encourage children to reflect on the key skills needed when working within Computing.







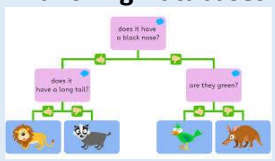
Impact: How will we know that our children are achieving?
By the end of each key stage, children are expected to know, apply and understand the skills and techniques specified in the Computing curriculum plan.

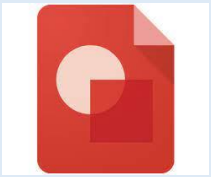
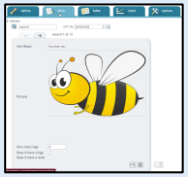
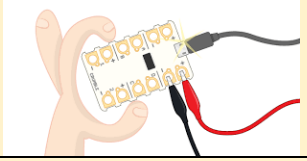
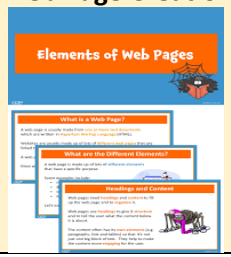
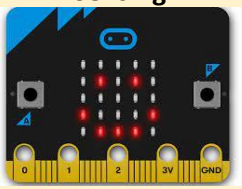
Children are assessed using our SONAR tracking system which identifies clear and progressive end points. This ensures progress is maintained and end of key stage expectations are met by all children. Children are assessed termly and a final summative assessment made at the end of the academic year. Children will be assessed as either Emerging, Developing, Secure or Exceeding, in accordance with Age Related Expectations.

In addition, we measure the impact of our curriculum through the following methods:

- A reflection on standards achieved against the planned outcomes;
- A celebration of learning for each term which demonstrates progression across the school (Curriculum Floor book);
- Pupil discussions about their learning (Pupil Voice);
- The annual tracking of standards across the curriculum. In KS1 and KS2

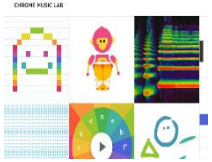
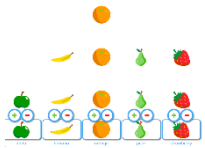
School Overview of Computing Coverage

	Autumn		Spring		Summer	
Y1	Computer Science Technology Around Us 	Information Technology Digital Painting 	Information Technology Digital Writing 	Information Technology Grouping Data 	Computer Science Moving A Robot 	Computer Science Introduction to  Animation
Y2	Computer Science IT Around Us 	Information Technology Digital Photography 	Information Technology Making Music 	Information Technology Pictograms 	Computer Science Robot Algorithms 	Computer Science An Introduction to Quizzes 
Y3	Computer Science Connecting Computers 	Computer Science Stop Frame Animation 	Information Technology Desktop Publishing 	Information Technology Branching Databases 	Computer Science Sequence In Music 	Computer Science Events and Actions in Programs 
Y4	Computer Science The Internet 	Computer Science Audio Production 	Computer Science Photo Editing 	Information Technology Data Logging 	Computer Science Repetition in Shape 	Computer Science Repetition in Games 

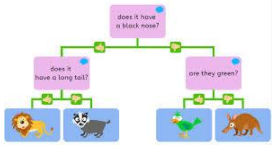
Y5	**Computer Science** **Computer Networks** 	**Information Technology** **What is Vector Drawing?** 	**Computer Science** **Video Editing** 	**Information Technology** **Fact-File Databases** 	**Computer Science** **Selection In Physical Computing** 	**Computer Science** **Selection in Quizzes** 
Y6	**Computer Science** **Communication and Collaboration** 	**Computer Science** **3D Modelling** 	**Computer Science** **Web Page Creation** 	**Information Technology** **Introduction to Spreadsheets** 	**Computer Science** **Variables In Games** 	**Computer Science** **Sensing** 

Teaching and Learning Sequences

Year 1					
Autumn		**Spring**		**Summer**	
Computer Science Technology Around Us	**Information Technology Digital Painting**	**Information Technology Digital Writing**	**Information Technology Grouping Data**	**Computer Science Moving A Robot**	**Computer Science Introduction to Animation**
					
1. Technology In Our Classroom- *Unplugged lesson.* **2.** Using Technology **3.** How do I use a Computer Keyboard- **4.** How do I further develop Key Board Skills? **5.** Using a computer responsibly	**1.** How Can We Paint Using Computers? **2.** Using Shapes and Lines to paint digitally **3.** Making Careful Choices when painting digitally **4.** Painting using a computer Independently **5.** Comparing Computer Art and Paintings- In class	1. Exploring the Keyboard 2. Exploring the Toolbar 3. Making Changes to Text 4. Explaining My Choices 5. Pencil or Keyboard	1. Label and Match- In class 2. Group and Count – In class 3. Count and describe an Object- iPads 4. Making Different Groups- iPads 5. Comparing Groups- iPads 6. Answering Questions- Computers	1. What are buttons for?- In class 2. Using and giving Directions - In class 3. Using Forwards and Backwards Commands- In class 4. Using direction Commands - Four Directions - In class 5. Getting There – planning a simple programme - In class 6. Creating Routes - In class	1. Comparing Tools to give commands – iPads 2. Joining Blocks to create a series of programming commands- iPads 3. Changing values and recognising effects – iPads 4. Adding Sprites – iPads 5. Project Design – animation and algorithm- In class 6. Following My Design to write an animation program – iPads

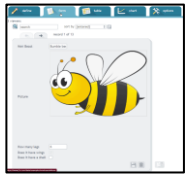
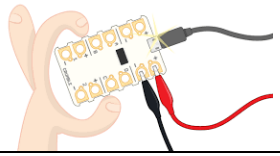
Year 2					
Autumn		**Spring**		**Summer**	
Computer Science IT Around Us	**Information Technology Digital Photography**	**Information Technology Making Music**	**Information Technology Pictograms**	**Computer Science Robot Algorithms**	**Computer Science An Introduction to Quizzes**
					

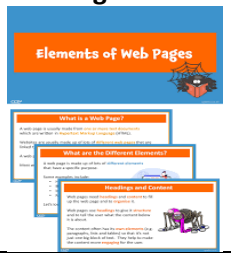
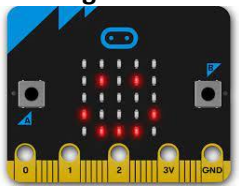
1. What Is IT?- In class lesson 2. What IT do we have in school? 3. How do we use IT in the World? In class 4. What are the Benefits of using IT? 5. How can we use information technology safely? 6. What choices can we make when using IT In different ways- *In class lesson*	1. How Can We Take a Photograph? iPad lesson 2. Making choices about orientation when taking photographs? 3. Making Careful Choices when taking a good photograph digitally 4. Can I improve my photographs with light? 5. How can use editing tools to change a photograph? 6. How can Photographs be changed? Is it real? *iPad lesson*	1. Can the computer make Music? – Complete on computers 2. How can music be created? Complete on computers 3. How can I make changes to notes and tempo in digital music composition- computer suite 4. Can I compose music digitally for a purpose? computer suite 5. Can I make music? - *computer suite*	1. How can we collect data in a Tally? In class 2. Entering data into a database 3. Can I create a pictogram using the computer – iPads 4. What is an Attribute? iPad or computer suite 5. Comparing People – iPads or Computer Suite 6. Presenting data digitally- Computers	1. How to give instructions?- In class 2. What happens when we change the order of instructions? - In class 3. Can I make predictions by reading a set of instructions?- In class 4. Creating and Using mats and routes - In class 5. Can I write an algorithm - In class 6. What is debugging? - In class	1. Scratch Recap and Revisit– iPads 2. Joining Blocks to create a series an algorithm with an outcome - iPads 3. Joining Blocks to create a series an algorithm with an outcome - iPads 4. Can I create a programme using a given design? – iPads 5. Project Design – animation and algorithm- In class 6. Evaluating my Design Program- iPads

Year 3					
Autumn		**Spring**		**Summer**	
Computer Science Connecting Computers	**Computer Science Stop Frame Animation**	**Information Technology Desktop Publishing**	**Information Technology Data and Information Branching Databases**	**Computer Science Programming Sequence In Music**	**Computer Science Events and Actions in Programs**
					
1. How does a digital device work 2. What parts make up a digital device? 3. What do Digital Devices do? In class/iPad 4. How am I connected? 5. How are computers connected? 6. What does our school network look like? - *In class lesson*	1. What is animation? iPad lesson 2. Can I make a stop Frame animation? 3. Can I create a storyboard and plan for an animation? 4. Can I complete a simple stop frame animation? 5. How can I review and edit my animation? 6. How can I evaluate my animation?	1. How can we use a publishing programme to add text and images? 2. How can we alter text, font size, colour and layout when publishing? Complete on computers 3. How can we use templates to make a magazine cover? computer suite	1. How can we use yes/no questions to organise data? In class 2. Using questions to create a branching database - classroom 3. Can I create a branching database using software – iPads or computers 4. What is an Attribute and how can it be used in a branching	1. What do I know about using the animation program ScatchJr?- In class 2. What happens when we try to create movement for a number of sprites? - In class 3. What happens when we try to create movement for a number of sprites? - In class	1. Can I describe the relationship between an event an and action in animation?- In class 2. Can I choose a character and manipulate movement with programming? - In class 3. Can I adapt my program?- In class 4. Can I develop my program adding additional features -

		4. Can I add content to my magazine ? computer suite 5. Can I look at how information can be laid out for different purposes? - *computer suite* 6. Why is desktop publishing important? - *computer suite*	database? iPad or computer suite 5. Can I combine my skills to create a branching database about dinosaurs - planning? – classroom 6. Can I combine my skills to create a branching database about dinosaurs - Computers	4. Can I create sequences of movements through programming?- In class 5. Can I create sequences of movements through programming?- In class 6. Can I create a program linked to a task description? - In class	Computers 5. Can I debug my program – Computers 6. Can I design and create a maze-based challenge using my programming skills? - Computers

Year 4					
Autumn		**Spring**		**Summer**	
Computer Science The Internet 	**Computer Science Audio Production** 	**Computer Science Photo Editing** 	**Information Technology Data and Information Data Logging** 	**Computer Science Repetition in Shape** 	**Computer Science Repetition in Games** 
1. How do networks physically link together?- In class 2. What is the internet made of? 3. What can be shared on the World Wide Web?- computers/iPad 4. What is a Website? – Computers/iPad 5. Who owns the World Wide Web? Computers/iPad 6. Can I believe what I read?	1. How can sound be recorded?- In class 2. How can we edit an audio recording? – Computer/iPad 3. What is a Podcast and how can I plan to record one?- Computer/iPad 4. Can I record and edit sounds to create a Podcast? – Computers/iPad 5. Can I enhance and develop my Podcast with sound effects and music? Computers/iPad 6. Can I evaluate my Podcast?	1. How can I change a digital image?- iPad 2. What happens when we change the colours and colour effects of images?- iPad 3. How does the cloning technique help to improve images? iPad 4. Can I use a range of tools to edit and combine images? iPad 5. Can I combine images for a purpose? iPad 6. Can I evaluate my work and make editing changes? I Pads	1. How can data gathered over time be used to answer questions? 2. How can I collect data over time with a digital device? 3. What is a data logger? 4. How can I analyse data in a data file? 5. Can I think of questions that can be answered from my logged data? 6. Can I use my data collected to answer questions?	1. What is Logo? 2. Can I write ordered instructions (code) to created my initials in logo? 3. How do I use the 'repeat' command in Logo? 4. How do loops in code create effects? 5. What is decomposition as how can it be used in code? 6. Can I create a program with count-controlled loops?	1. How can I create loops of code in the Scratch program?- 2. What types of loop can be created in programming? 3. Can I develop a design using loops to create a short animation? 4. Can I modify code for a game design to change how things happen? 5. Can I design a game that includes the use of repetitive code in the algorithm? 6. To create a game using my coding skills?

Year 5					
Autumn		**Spring**		**Summer**	
Computer Science **Computer Networks** 	**Information Technology** **What is Vector Drawing?** 	**Computer Science** **Video Editing** 	**Information Technology** **Flat-File Databases** 	**Computer Science** **Selection In Physical Computing** 	**Computer Science** **Selection in Quizzes** 
1. How are computers connected into systems?- In class 2. What happens in larger computer systems? - In class 3. How is information transferred over the internet? - In class 4. How can we share information online? - In class 5. Can I contribute to a shared project when working online? - In class 6. What is the impact of working together inline? - In class	1. How do different drawing tools produce different outcomes? In class 2. Can I create a vector drawing by combining shapes? – iPad/Computer 3. Can I use a range of drawing tools to create an effective drawing?- In class 4. Do I understand that vector drawings consist of layers? iPad/Computer 5. How can I group objects when drawing to make it easier to draw? iPad/Computers 6. Create a Vector Drawing – IT Project	• What is a Video?- In class • What happens when we change the order of instructions? - In class • Can I use different techniques to capture images?- In class • Creating a video storyboard - In class • Can improve my video with reshooting and editing? - In class • Can I evaluate my video? - In class	1. How can I use a form to record information?- 2. What is the difference between a computer and a paper-based database? 3. Why and how do we use a database to answer questions?- 4. How do we use tools to search for data? 5. Can I write an algorithm? 6. Can I use a database in real life?	1. How can I control a simple circuit connected to a computer?- 2. Can I write a program that includes count-controlled loops? 3. Can I understand that a loop in a program stops when a condition is met?- 4. How are loops used? 5. Can I design a physical project that includes selection? 6. Can I create a program to control a physical computing project?	1. What are conditions? 2. Can I select outcomes in a program? 3. Can I ask questions in a program? 4. Can I plan a quiz program? 5. Can I test my program? 6. Can I evaluate my program?

Year 6					
Autumn		**Spring**		**Summer**	
Computer Science Communication and Collaboration 	**Computer Science 3D Modelling** 	**Computer Science Web Page Creation** 	**Information Technology Introduction to Spreadsheets** 	**Computer Science Variables In Games** 	**Computer Science Sensing Movement** 
1. What is an internet address? 2. What is a data packet? 3. How do computer systems work together? 4. How do computer systems share information? 5. How do we comminute using a computer? 6. How can we communicate responsibly?	7. What is 3D Modelling? 8. How can I manipulate a 3D model? 9. Can I duplicate, resize and reorient 3D shapes? 10. Can I create a 3D model for a given purpose? 11. Can I plan a 3D model? 12. Can I create a 3D model?	1. What makes a good website? 2. How would you lay out your web page? 3. Copyright or copywrong? 4. Can I review how my website looks? 5. What is a navigation path? 6. What is linked content? Why do I need to be careful with this?	1. What is a Spreadsheet? 2. How can I create a spreadsheet? 3. What's the formula? 4. How can I calculate and duplicate? 5. Can I plan an event using Excel? 6. How can I present data using Excel?	1. What is a variable? 2. What are variables in programming? 3. How can I improve a game? 4. Can I design a game? 5. Can I code my design into a game? 6. How can I improve and share my work?	his unit is the final KS2 programming unit and brings together elements of all the four programming constructs: sequence from Year 3, repetition from Year 4, selection from Year 5, and variables (introduced in Year 6 – 'Programming A'). It offers pupils the opportunity to use all of these constructs in a different, but still familiar environment, while also utilising a physical device — the micro:bit. 1. What is a micro:bit? 2. Go with the flow? 3. How do I sense inputs 4. How do I plan a program? 5. Can I design a step counter program? **6.** Can I make a step counter program?

National Curriculum Subject Content

Key stage 1 – National Curriculum

Pupils should be taught to:

- understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- create and debug simple programs
- use logical reasoning to predict the behaviour of simple programs
- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- recognise common uses of information technology beyond school
- use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Key stage 2 – National Curriculum

Pupils should be taught to:

- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration
- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

Curriculum Coverage and Skill Progression

Computing Curriculum Coverage Year 1	Technology Around Us	Digital Painting	Digital Writing	Grouping Data	Moving a Robot	Introduction to Animation
• understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions						
• create and debug simple programs						
• use logical reasoning to predict the behaviour of simple programs						
• use technology purposefully to create, organise, store, manipulate and retrieve digital content						
• recognise common uses of information technology beyond school						
• use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.						

Computing Curriculum Coverage Year 2	It Around Us	Digital Photography	Making Music	Data Pictograms	Robot Algorithms	Introduction to Quizzes
• understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions						
• create and debug simple programs						
• use logical reasoning to predict the behaviour of simple programs						
• use technology purposefully to create, organise, store, manipulate and retrieve digital content						
• recognise common uses of information technology beyond school						
• use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.						

Computing Curriculum Coverage Year 3	Connecting Computers	Animation	Desktop Publishing	Branching Databases	Sequence in Music	Events and Actions
• design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts						
• use sequence, selection, and repetition in programs; work with variables and various forms of input and output						
• use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs						
• understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration						
• use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content						
• select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information						
• use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact						

Computing Curriculum Coverage Year 4	The Internet	Audio Editing	Photo Editing	Data Logging	Repetition in Shape	Repetition in Computing
• design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts						
• use sequence, selection, and repetition in programs; work with variables and various forms of input and output						
• use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs						
• understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration						
• use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content						
• select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information						
• use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact						

Computing Curriculum Coverage Year 5	Computer Networks	Vector Drawing	Video Editing	Fact File Databases	selection in physical computing	selection in games
• design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts						
• use sequence, selection, and repetition in programs; work with variables and various forms of input and output						
• use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs						
• understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration						
• use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content						
• select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information						
• use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact						

Computing Curriculum Coverage Year 6	computer communication	3D modelling	webpage creation	spreadsheets	variables in games	sensing
• design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts						
• use sequence, selection, and repetition in programs; work with variables and various forms of input and output						
• use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs						
• understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration						
• use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content						
• select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information						
• use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact						