

**LEARNING
WITHOUT LIMITS**



Successful learners
Confident individuals
Responsible Citizens

Ladybrook Primary School

Computing



Our school intention for Computing

Our children will:

- Understand that computers are all around us (even when we cannot see them) and can be programmed to control physical and virtual objects and systems.
- Be digitally literate using technology safely and respectfully, keeping personal information private; and able to recognise acceptable/unacceptable behaviour online.
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content.
- Design, write and debug programs that accomplish specific goals; using and understanding computational language.
- Use computing across the curriculum as a tool for learning
- **By the end of Key stage two be equipped to use computational thinking and creativity to understand and influence the world around them positively.**



Ambitious Curriculum
'Technology does not drive change -- it enables change.'
Unknown



What policy decisions have we made about Computing?



- **Computing is recognised as a discrete discipline.**
- **Teaching and Learning must engage** – projects, presentations, opportunities to share final products – animations/posters/presentations
- **Vocabulary is a priority within our curriculum design** – must be taught explicitly and assessed ongoing
- **Investment in high quality resourcing throughout** – Micro bits / Lego Wedo / I pads/ Chrome books
- **Opportunities for cross curricular links** – Green screen news reports linked to topic, eBook presentations of Literacy work, Science results recorded with data loggers.



What does our Progression for Computing look like? Why?

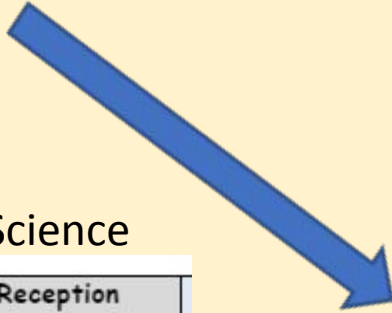


Digital Literacy

Our starting point in Nursery and Reception is to introduce relevant EYFS Framework objectives from Understanding the World.



Information Technology



Computer Science

Nursery - 3 / 4 Year olds	Reception Early Learning Goals
Explore how things work.	Develop their small motor skills so that they can use a range of tools competently, safely and confidently.

Reception Early Learning Goals
Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.
Explore, use and refine a variety of artistic effects to express their ideas and feelings.

Nursery - 3 / 4 Year olds	Reception Early Learning Goals
Remember rules without needing an adult to remind them.	Explain the reasons for rules, know right from wrong and try to behave accordingly.
Match their developing physical skills to tasks and activities in the setting.	Know and talk about the different factors that support their overall health and wellbeing: - sensible amounts of 'screen time'.
	Show resilience and perseverance in the face of a challenge.
	Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.



What does our Progression for Computing look like? Why?



Our progression map for Computing has been designed by the team to ensure that steps in learning between year groups for all aspects of the subject are incremental to support sound understanding and long-term recall. For example, digital literacy has been planned to build from Year 1 to Year 6.

Information technology	Nursery - 3 / 4 Year olds	Reception Early Learning Goals	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.	I can use a mouse to navigate on a screen	I can add and edit text, considering style, colour and layout.	I can organise and present information for a specific audience.	With support, plan the structure and layout of document/presentation	Plan the structure and layout of document/presentation independently. Format text to indicate relative importance
		Explore, use and refine a variety of artistic effects to express their ideas and feelings.	I can type and edit text using Google Docs	I can make use of basic editing skills - shift key/caps lock for upper case, question marks etc	I can use font sizes and effects appropriately text boxes, columns, word art, cut, copy and paste. Delete, insert, replace and spellchecker.	When typing, begin to hold two hands over different halves of the keyboard and use more than two fingers to enter text	Make corrections using a range of tools .Justify text where appropriate. Cut and paste between applications.	Delete/insert and replace/improve.
		I can use the paint package chosen by my teacher to communicate my ideas.	I can type using two hands with my fingers on the correct keys.	I can select an appropriate paint tool within a paint package to communicate my ideas.	I can type using two hands with my fingers on the correct keys.		Develop confidence using both hands when typing	Confid hands
		I can take a photo / video using an iPad, with support.						

Digital Literacy	Nursery - 3 / 4 Year olds	Reception Early Learning Goals	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		Remember rules without needing an adult to remind them.	Explain the reasons for rules, know right from wrong and try to behave accordingly.	I treat technology devices respectfully.	I can talk about why it is important to be kind and polite online and in real life.	I can explain why I need to keep my personal information and my passwords private.	I can describe the things that happen online that I must tell an adult about.	I can log on to the school network independently.
	Match their developing physical skills to tasks and activities in the setting.	Know and talk about the different factors that support their overall health and wellbeing: - sensible amounts of 'screen time'.	I know my personal information should not be shared online.	I can explain why I need to keep my personal information and my passwords private.	I can describe the things that happen online that I must tell an adult about.	I can describe the things that happen online that I must tell an adult about.	I can log on to the school network independently.	I am starting to understand that other people have created the information I use.
		Show resilience and perseverance in the face of a challenge.	I know who to tell if I see something I do not like online.	I can explain why I need to keep my personal information and my passwords private.	I can describe the things that happen online that I must tell an adult about.	I can describe the things that happen online that I must tell an adult about.	I can log on to the school network independently.	I am starting to understand that other people have created the information I use.
		Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.	I know who to tell if I see something I do not like online.	I can explain why I need to keep my personal information and my passwords private.	I can describe the things that happen online that I must tell an adult about.	I can describe the things that happen online that I must tell an adult about.	I can log on to the school network independently.	I am starting to understand that other people have created the information I use.
			I can save and retrieve my work onto the computer with support.	I can save, retrieve and edit my work on the computer / iPad, with little support.	I can save, retrieve and edit my work on the computer / iPad, independently.	I can save, retrieve and edit my work on the computer / iPad, independently.	I can save, retrieve and edit my work on the computer / iPad, independently.	I can save, retrieve and edit my work on the computer / iPad, independently.

Computer Science	Nursery - 3 / 4 Year olds	Reception Early Learning Goals	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		Explore how things work.	Develop their small motor skills so that they can use a range of tools competently, safely and confidently.	I can create a simple program, debugging when there is a mistake.	I can program a bot using repeated commands	Use the repeat command and begin to use procedures more efficiently.	Use a greater range of conditionals including while , if else , repeat until . Use and change a pre written procedure .	Use 'say' commands to give information.
			I can use the word algorithm when giving a sequence of instructions to a bot/roamer. I understand what an algorithm is. I can start to use logical reasoning to predict the behaviour of simple programs	I understand how algorithms are implemented as programmes on digital devices. I can use logical reasoning to predict the behaviour of simple programmes	I can use logical reasoning to explain how some simple algorithms work.	I can use logical reasoning to detect and correct errors in algorithms . (debugging)	I can use logical reasoning to detect and correct errors in programs (debugging)	I can solve problems by decomposing them into smaller parts.
				I can sequence a set of instructions using a set of symbols, test the sequence and debug where necessary.	Sequence a list of commands / blocks to produce a pre drawn shape/robot follow route. Use repeats , conditionals and wait .	Begin to predict, program, test and amend longer sequences of instructions to achieve an intended objective.	Use 'and' or 'not' blocks to change responses and understand what they do.	Test and debug new and existing programs.
			I can create a simple animation using scratch JR.	I can make a simple computer game using Scratch.	Use conditional statements to enable characters to interact with other characters or sensors. (if and when commands)	Understand that many real-world devices (such as traffic lights, washing machines) are controlled using computer programs. Understanding sensing devices can be used to monitor changes in environmental conditions and are present in a variety of real-life situations	Understand what variables and procedures are in real life and be able to create them within a computer program to store and retrieve data.	Program and explain what happens when more than one variable changes, thinking logically that when x happens y is the result and show this using code, flowcharts, diagrams or explanations.



What does our Progression for Computing look like? Why?



	Nursery - 3 / 4 Year olds	Reception Early Learning Goals	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Digital Literacy	Remember rules without needing an adult to remind them.	Explain the reasons for rules, know right from wrong and try to behave accordingly.	I treat technology devices respectfully.	I can talk about why it is important to be kind and polite online and in real life.	I understand the importance of being respectful when I am online.	I know anything I post online can be seen and /or shared by others.	I can explain the importance of using social media internet or engines safely.	I can explain the consequences of not
	Match their developing physical skills to tasks and activities in the setting.	Know and talk about the different factors that support their overall health and wellbeing - sensible amounts of 'screen time'.	I know my personal information should not be shared online.	I can explain why I need to keep my personal information and my passwords private.	I can talk about what makes a secure password and sensible username and why they are important.	I can make sensible choices when creating passwords and usernames online.	I am able and understand for person safety.	
		Show resilience and perseverance in the face of a challenge.	I know who to tell if I see something I do not like online.	I can describe the things that happen online that I must tell an adult about.	I can use safety features of websites as well as reporting concerns to an adult.	I can talk about the ways I can protect myself and my friends from harm online.	I can explain need to protect myself and friends on inappropriate content including cyberbully including concerns.	
		Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.	I can log on to the school network independently.	I am starting to understand that other people have created the information I use.	I can describe the World Wide Web as part of the internet that contains websites.	I understand not everything I find on the World Wide Web is reliable information.	I can recognise and evaluate different types of information.	
			I can save and retrieve my work onto the computer with support.	I can save, retrieve and edit my work on the computer / iPad with little support.	I can save, retrieve and edit my work on the computer / iPad independently.	I can save, retrieve and edit my work. I can create folders to keep my work organised.	I can take collaborative using a variety of methods - web quest, discussion, conference, google doc	

	Nursery - 3 / 4 Year olds	Reception Early Learning Goals	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Computer Science	Explore how things work.	Develop their small motor skills so that they can use a range of tools competently, safely and confidently.	I can create a simple program, debugging when there is a mistake.	I can program a bot using repeated commands	Use the repeat command and begin to use procedures more efficiently.	Use a greater range of conditionals including whilst, if else, repeat until . Use and change a pre written procedure .	Use 'say' commands to give information.	Know when to use 'repeat', 'repeat until', and 'forever if' loops to make programs shorter and more efficient.
			I can use the word algorithm when giving a sequence of instructions to a bot/roamer.	I understand how algorithms are implemented as programmes on digital devices. I can use logical reasoning to predict the behaviour of simple programmes	I can use logical reasoning to explain how some simple algorithms work.	I can use logical reasoning to detect and correct errors in algorithms (debugging)	I can use logical reasoning to detect and correct errors in programs (debugging)	I can solve problems by decomposing them into smaller parts.
				I can sequence a set of instructions using a set of symbols, test the sequence and debug where necessary.	Sequence a list of commands / blocks to produce a pre drawn shape/robot follow route. Use repeats, conditionals and wait .	Use conditional statements to enable characters to interact with other characters or sensors. (if and when commands)		
			I can create a simple animation using scratch JR.	I can make a simple computer game using Scratch.				

	Nursery - 3 / 4 Year olds	Reception Early Learning Goals	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Information technology		Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.	I can use a mouse to navigate on a screen	I can add and edit text, considering style, colour and layout.	I can organise and present information for a specific audience.	With support, plan the structure and layout of document/ presentation	Plan the structure and layout of document/ presentation independently. Format text to indicate relative importance	Through peer assessment and self-evaluation, make suitable improvements to documents and presentations
		Explore, use and refine a variety of artistic effects to express their ideas and feelings.	I can type and edit text using Google Docs	I can make use of basic editing skills - shift key/caps lock for upper case, question marks etc	I can use font sizes and effects appropriately text boxes, columns, word art, cut, copy and paste. Delete, insert, replace and spellchecker.	When typing, begin to hold two hands over different halves of the keyboard and use more than two fingers to enter text	Make corrections using a range of tools Justify text where appropriate. Cut and paste between applications.	Delete/insert and replace text to improve clarity and mood.
			I can use the paint package chosen by my teacher to communicate my ideas.	I can select an appropriate paint tool within a paint package to communicate my ideas.	I can type using two hands with my fingers on the correct keys.		Develop confidence using both hands when typing	Confidently use both hands when typing.
			I can take a photo / video using an iPad with support.	I can use filters and effects to manipulate images or make changes.	Build up images by selecting, copying and pasting within the image.	Be able to import a photograph, explore the effects which can be created and use a range of visual effects such as filters, hues and painting over photographs to give different effects	To be able to select, copy and paste within and between photographs	To be able to explore "airbrush" techniques to improve photographs, such as used in magazines with celebrities
			I can use a voice tool to record my voice	I can capture photographs and video using a camera/iPad.	Sequence still images and video and use simple editing techniques to create a presentation	Sequence and edit video footage and still images once transferred from a digital camera to computer	Select appropriate software for the task/audience evaluating and selecting suitable information and media from a range	Independently, plan structure and layout of multimedia presentation

Computing is broken down into three aspects:
 Digital Literacy
 Computer Science
 Information Technology



What does our Progression for Computing look like? Why?



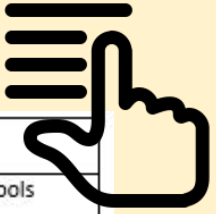
Computing						
Autumn Term 1 Year 1						
Computing systems and networks – Technology around us - https://teachcomputing.org/curriculum/key-stage-1/computing-systems-and-networks-technology-around-us						
Information Technology		<ul style="list-style-type: none"> I can use a mouse to navigate on a screen to open a file or select options. I can use the paint package chosen by my teacher to communicate my ideas. 	<ul style="list-style-type: none"> I can use a mouse to navigate on a screen to open a file or select options. I can use the paint package chosen by my teacher to communicate my ideas. 	<ul style="list-style-type: none"> I can type and edit text using Google Docs I am familiar with a computer keyboard 	<ul style="list-style-type: none"> I can use a mouse to navigate on a screen to open a file or select options. I can type and edit text using Google Docs I am familiar with a computer keyboard 	
Computer Science						
Digital Literacy	<ul style="list-style-type: none"> I treat technology devices respectfully. I know my personal information should not be shared online. I know who to tell if I see something I do not like online. 	<ul style="list-style-type: none"> I can log on to the school network / Chrome book with support. I can save and retrieve my work onto the computer with support. I treat technology devices respectfully. I know my personal information should not be shared online. 	<ul style="list-style-type: none"> I can log on to the school network / Chrome book with support. I treat technology devices respectfully. 	<ul style="list-style-type: none"> I can log on to the school network / Chrome book with support. I can upload finished work onto Google Classroom with support. 	<ul style="list-style-type: none"> I can log on to the school network / Chrome book with support. I can save and retrieve my work onto the computer with support. 	<ul style="list-style-type: none"> I treat technology devices respectfully. I know my personal information should not be shared online. I know who to tell if I see something I do not like online.
Vocabulary	technology	log in, password, mouse, screen, keyboard		typing, save	retrieve, open, arrow, cursor	online safety, responsible
Activities	Technology around us. Children become familiar with the word 'technology'. They will classify what is and what is not technology in their school and/or classroom. Help children understand how technology helps us in different ways. They will be able to explain how to keep themselves safe online and where to go for support when they see content that makes them feel uncomfortable.	Children will get to know the main parts of a desktop or laptop computer. They will practise turning on and logging in to a computer using their own login - remind the children to keep their login details private and discuss why. Children will apply their knowledge of the different parts of a computer, to complete a mouse-based task.	3 Developing mouse skills Children will be building on the mouse skills they were introduced to in Lesson 2. Children will use the mouse to open a program and create a simple picture.	4 Using a computer keyboard Children will begin to use the computer keyboard for a purpose. They should understand that writing on a keyboard is called typing and will begin to demonstrate their ability to write their name. Children will then save their work using the save icon and understand that this icon is used in lots of different programs. With support the children will learn how to upload their work into Google Classroom.	5 Developing keyboard skills Children will begin by opening a file they have previously created. They will demonstrate their ability to use a keyboard to edit text, by writing a sentence and then deleting letters. They will also use the keyboard arrow keys to move the text cursor in their textbox.	6 Using a computer responsibly Children will be introduced to the concept of using computers safely, within the context of a school setting. They will explore why we have rules in school and how those rules help us, and then apply this understanding to rules needed for using computer technology safely. Go through our school computer safety rules.

Each Year group then has their own planning targeted to their specific year objectives.

Computing						
Year 6 Autumn Term 1						
Information Technology			Confidently use both hands when typing.	Confidently use both hands when typing.	Confidently use both hands when typing.	
Computer Science						Export and analyse data. Test and debug new And existing programs.
Digital Literacy		I can explain the consequences of not communicating respectfully online. I can explain the importance of personal internet safety rules. I can develop and understand a code of conduct for online collaboration, and explain what to do in cases of cyberbullying.	I can use reliable information from the internet to make notes and present in a form of my choosing, without using copied / pasted text. I can initiate, create and take part in collaborative learning using a variety of methods – quizzes, web quests, discussions, video conferencing, and google documents.	I can use reliable information from the internet to make notes and present in a form of my choosing, without using copied / pasted text. I can initiate, create and take part in collaborative learning using a variety of methods – quizzes, web quests, discussions, video conferencing, and google documents.	I can use reliable information from the internet to make notes and present in a form of my choosing, without using copied / pasted text. I can initiate, create and take part in collaborative learning using a variety of methods – quizzes, web quests, discussions, video conferencing, and google documents. I am able to use a range of search engines and select the most appropriate based on the tools they provide.	Add formulas to spreadsheets, enter data and use filters to sort information. Present information in chart/graph for analysis. Present findings to a specific audience.
Vocabulary	website, web page, web address, routing, web browser, World Wide Web, content, links, files, use, download, sharing, ownership, permission, information, accurate, honest, content, adverts					data, collecting, table, spreadsheet, cell, data item, format, calculation, range, duplicate, question, data set, organised, chart, evaluate, results, comparison, software, tools.
Activities	Introduce parents to Commonsense media in year group meeting	Use the https://beinternetawesome.withgoogle.com/	Use information found online to inform presentation work,	Use information found online to inform presentation work,	Use information found online to inform presentation work,	Graph information from geography research eg



What essential knowledge* do we want our children to acquire?



We have identified the essential knowledge which our units of work enable children to learn.

***Knowledge includes facts, familiarity with situations and practical skills.**

Year	Knowledge
EYFS	<ul style="list-style-type: none">Develop their small motor skills so that they can use a range of tools competently, safely and confidently.
Year 1	<ul style="list-style-type: none">understand what algorithms are; how they are implemented as programs on digital devicesunderstand that programs work by following precise and clear instructionscreate and debug simple programs
Year 2	<ul style="list-style-type: none">use logical reasoning to predict the behaviour of simple programsuse technology purposefully to create, organise, store, change and retrieve digital content.recognise common uses of information technology beyond schooluse technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.
Year 3	<ul style="list-style-type: none">design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems;solve problems by decomposing them into smaller parts
Year 4	<ul style="list-style-type: none">use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
Year 5	<ul style="list-style-type: none">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 informationunderstand 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
Year 6	<ul style="list-style-type: none">use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital contentuse sequence, selection, and repetition in programs; work with variables and various forms of input and output



What does our Progression of Computing Vocabulary look like? Why?

We limit the build up of technical vocabulary, repeat and build upon it regularly to instil its use and understanding

Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
keyboard							
screen							
	mouse						
		online					
		algorithm					
		debug					
		network					
		website					
		input / output					
		Search engine					
		online safety					
		password					
		personal information					
			repeated command sequence				
			simulation data				
				Condition/ selection command			
				data logger			
				cyberbullying			
				branching database software			
				stop-frame animation multimedia			
					conditionals		
					procedure		
					sensor		
					spreadsheet		
						variables	
						continuous data	
						fields	
						export	
							formula
							loop





• How have we sequenced learning from EYFS to Year 6? Why?

Our **clear sequence** for learning begins in Nursery and Reception where there are computers and iPads with age-appropriate apps.

Computing is not only taught explicitly but it is incorporated into other subjects when relevant for cross curricular learning opportunities

Vocabulary is introduced, modelled and repeated through planned learning opportunities to embed its use

My algorithm by: Amelie H

How to draw a Crazy Character called: Roxsie

- 1 Draw a round head.
- 2 Draw 8 triangle legs.
- 3 Draw 4 square arms.
- 4 Draw a heart body.
- 5 Draw 2 round eyes.
- 6 Draw 2 triangle ears.



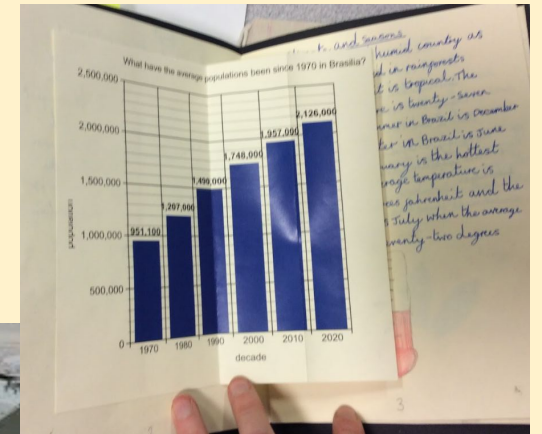
THE ROMAN'S by Luca

File Edit View Insert Format Slide Arrange Tools Help

Background Layout Theme Transition

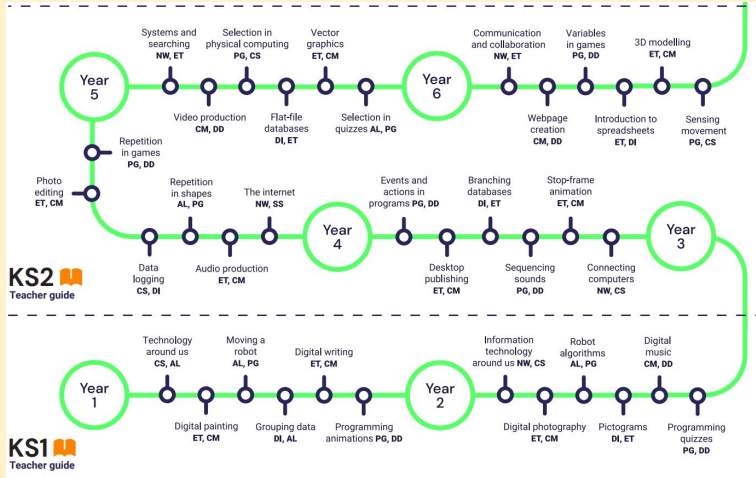
1 2 3 4 5 6

THE ROMAN'S
By Luca





• How have we sequenced learning from EYFS to Year 6? Why?



We ensured that the key skills of computing are used repeatedly in as many lessons as possible within each unit of work. We use complimentary resources to support our learning such as:

- Barefoot computing
- Teach Computing
- Purple Mash
- MicroBits

All providing age-appropriate learning resources to match with the technology available at Ladybrook

<p>SPRINGTIME Age: 4-6 years</p> <p>Curriculum Links: Early Years</p> <p>Concepts & Approaches: Abstraction, Tinkering, Creating, Collaborating, Algorithms, Persevering, Decomposition</p> <p>Three Spring themed activities see the children make a Rabbit run, create Junk scarecrows and explore sequencing whilst planting seeds.</p> <p>Download Resource</p>	<p>SUMMER FUN Age: 4-6 years</p> <p>Curriculum Links: Science, Maths, English, D&T</p> <p>Concepts & Approaches: Tinkering, Persevering, Patterns, Logic, Decomposition, Debugging, Collaborating, Algorithms</p> <p>Children explore their surroundings and get creative, take a journey and make a map, and discover seaside tangrams, in these three fun activities.</p> <p>Download Resource</p>	<p>AWESOME AUTUMN Age: 4-6 years</p> <p>Curriculum Links: Early Years</p> <p>Concepts & Approaches: Creating, Pattern, Logic, Algorithms, Decomposition, Collaborating</p> <p>Three Autumn themed activities which see the children explore patterns in Garlands Galore, create a leaf labyrinth and make Pumpkin Soup using computational thinking skills.</p> <p>Download Resource</p>
--	---	---

Home/Computing/Computing Scheme of Work

*Excel files - Once downloaded, you may need to right click on the file from Windows file explorer, click properties and then click security (Unblock) to enable Macros.

- Quick Start Guide
- Computing Scheme of Work Overview
- Assessment
- Knowledge & Progression
- Reception
- Year 1
- Year 2
- Year 3
- Year 4
- Year 5
- Year 6
- Computing Vocabulary
- Printable Icon Posters
- Key Terms Explained
- Computing Unplugged

Lesson 1: Name badge

Students create their first programs and transfer them to their micro:bits.

Key learning:

- Understand the micro:bit is a tiny computer which needs instructions in code to make it work.
- Understand that sets of instructions for computers in a sequence are also called algorithms or programs.
- Use the MakeCode editor to create instructions in code that the micro:bit can understand and then transfer them to the micro:bit.
- Know the micro:bit has an LED display output which it can use to show words (as well as numbers and pictures).

Computational thinking: Algorithms

Computer systems: Input/output

Programming: Iteration

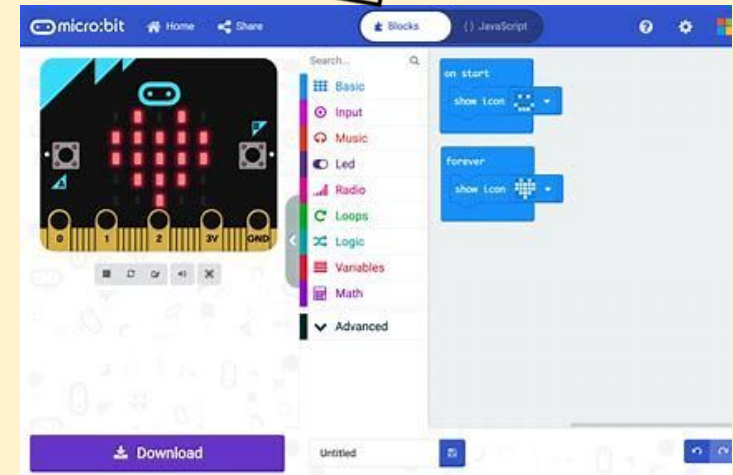
[Lesson 1 details](#)



• How have we sequenced learning from EYFS to Year 6? Why?



Learning progressively builds on previous learning and ensures age appropriate resources are used.



AT THE END: The children build up to a final project – animation / power point presentation / multi media presentation



• How do children demonstrate that they know more and remember more?



AT THE BEGINNING: Children are asked to recall prior learning...

- Last year you learnt....



- This term you will learn....



- This will help you next year when you'



AT THE END: The children build up to a final project – animation / power point presentation / multi media presentation



How do we ensure inclusion in Computing?



Teachers plan inclusive lessons creating an inclusive environment

- For learners with special educational needs and disabilities, specific resources or approaches may be required to enable them to access the curriculum. – Chrome books for typing, apps for narrating stories, recording oral compositions.
- Learning prompts or scaffolds may be provided so that learners benefit from support during initial phases of learning. Tasks are adapted to make the curriculum accessible to all – children may work in pairs to support each other.
- In computer science, there can be multiple solutions to a problem. Focused instruction and encouragement on solving problems and the problem-solving process, rather than finding a single right answer.
- There is an emphasis on guided inquiry, designing learning opportunities where learners can ask questions, explore, try different approaches and challenge their own and each other's ideas.
- Good relationships with pupils to identify opportunities to connect learning to their personal experience. Using stories and experiences about using computer science that will be meaningful and relatable to the children.



How do we ensure inclusion in Computing?

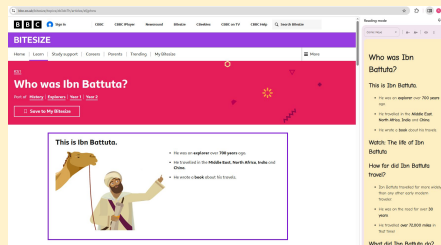


Adaptive teaching

- Subject Lead & Deputy Head have taken part in adaptive teaching training 2024-2025

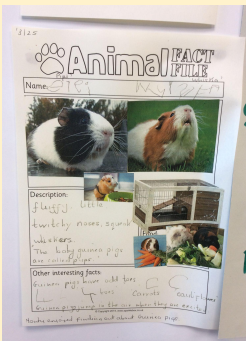
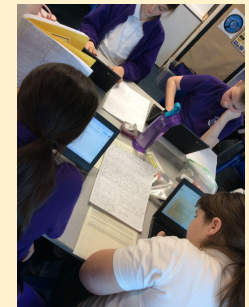
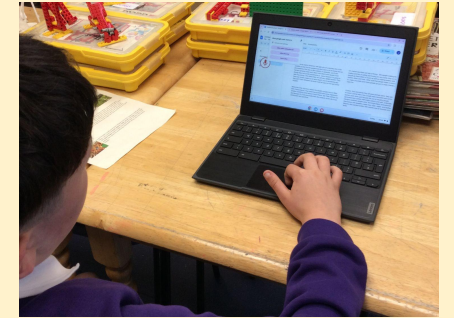
Adaptive teaching - Reading

- Using reader mode when accessing websites
- Accessing the read aloud Option on certain websites.
- Pen readers available in school.



Adaptive Teaching - Writing

- Using voice to text settings on Google Chrome so children are able to tell their stories as the document types it.
- Changing page colour and font size to children's preference.
- Adding images and/or sentence starters to scaffold the writing.
- Introducing software like clicker to help children compose writing using given word banks.
- Printed pictures / images to inspire writing.





How do we ensure cultural inclusion in Computing?



Teachers plan inclusive lessons creating an inclusive environment

- Ensuring that any resources show representations of different faiths, cultures, countries and children are given opportunities to express themselves through art, music and other creative outlets so they can share their own ideas and identities.
- Use of translate tool for children to access websites in their first language where appropriate.
- Good relationships with pupils to identify opportunities to connect learning to their personal experience and identity. Using stories and experiences that will be meaningful and relatable to the children.

The image shows a composite of three website screenshots and a grid of avatars. The top-left screenshot is in Ukrainian, titled "Що таке Великобританія?". The top-right screenshot is in Chinese, titled "是什麼?". The bottom-left screenshot is in Urdu, titled "برطانیہ کیا ہے?". The bottom-right screenshot shows a grid of 30 diverse avatars with names: Jaime, Jamal, Jordyn, Jovi Dance, Kai, Kia, Kiran, Knight, LB Dance, Marian, Max, Mermaid, Monet, Noor, Outfielder, Pitcher, Prince, Princess, Ruby, Sam, Sasha, Singer1, Tatiana, Taylor, Ten00 Dance, Trisha, and Wanda.



How do we support parents ?



- There is an online safety section on the school website which includes linked to our school E Safety guide, parental guides and links about keeping children safe online.
- Tanya Cross has also been into school to run sessions for parents on staying safe online.
- There are also useful links on our school website from Tanya about online safety and keeping our children safe online.
- There is also a list of safe search engines children can access when completing homework/research online.

The screenshot shows the website for Ladybrook Primary School and Nursery. The header includes the school logo and navigation links: Home, About Us, Key Info, News, Parents, and Children. The main content area is titled "Online Safety" and contains the following text:

Keeping your children safe online

Now more than ever online safety is paramount, keeping your child safe from harm online is a parental responsibility and at school we strive to educate our pupils about keeping safe online. We also teach our pupils what to do if they do encounter something that makes them feel uncomfortable online. Below are the Ladybrook ESafety guidelines for pupils. Please read through them with your children.

Ladybrook Primary School ESafety Guidelines for pupils

List of useful websites from Tanya Cross:

- <https://www.internetmatters.org/advice/esafety-leaflets-resources/>
- <https://www.net-aware.org.uk/>
- <https://www.thinkuknow.co.uk/>
- <https://www.thinkuknow.co.uk/parents/Get-help/Reporting-an-incident/>
- <https://www.nspcc.org.uk/preventing-abuse/keeping-children-safe/underwear-rule/pants-how-to-answer-questions/>
- <https://vodafone.digitalparenting.co.uk/>
- <https://www.vivf.org.uk/>
- <https://www.nspcc.org.uk/preventing-abuse/keeping-children-safe/online-safety/>
- <https://parentinfo.org/>
- <https://www.childnet.com/parents-and-carers>

Here is a list of some safe search engines for children to use when researching. Please remember that not everything that is found online is reliable, it is worth comparing a few websites to find the most accurate information.

Safe Search engines for children

- <http://www.kidtopia.info/>
- <https://teachthechildrenwell.com/>
- http://www.lures.info/childrens_search/gogooligans.html
- <https://www.factmonster.com/>
- <http://cybersleuth-kids.com/>
- <https://www.kidzsearch.com/sites.html>
- <https://swiggle.org.uk/>
- <https://primaryschoolict.com/>
- <http://www.dibdabdo.com/>
- <https://www.britannica.com/>



How have we constructed and renewed the curriculum for Computing?



- **Brief summary of the story so far:** High Impact
- **Subject leader Training:** Stockport LA
- **Staff Training:** High Impact / Promethean / Rebecca Foley
- **Use of outside Expertise:** High Impact, Barefoot computing, Teach computing, Purple Mash
- **Enrichment computing** – Each class has ½ a term of computing lessons from the computing lead