

Computing Curriculum Map KEPS 2025-26

Units to be used over the academic year to link, where possible, with current learning. Hyperlinks to each unit on NCCE website to ensure the most current lesson plans are used.

Key:

Computing Systems and Networks
Multimedia skills (Creating media)
Data and information
Programming
Online Safety

Beech class EYFS	Barefoot Computing ▪ Awesome Autumn	Barefoot Computing ▪ Winter Warmers	Barefoot Computing ▪ Springtime	Barefoot Computing ▪ People who help us	Barefoot Computing ▪ Summer fun	Barefoot Computing ▪ Busy bodies
Beech class (Year 1)	Active Bytes Autumn 1 Year 1 Computing systems and networks – Technology around us	Active Bytes Autumn 2 Year 1 Creating media – Digital painting	Active Bytes Spring 1 Year 1 Creating media – Digital writing	Active Bytes Spring 2 Year 1 Data and information – Grouping data	Active Bytes Summer 1 Year 1 Programming A – Moving a robot	Active Bytes Summer 2 Year 1 Programming B – Introduction to animation
	Develop your learners' understanding of technology and how it can help them. They will become more familiar with the different components of a computer by developing their keyboard and mouse skills, and also start to consider how to use technology responsibly.	Explore the world of digital art and its exciting range of creative tools with your learners. Empower them to create their own paintings, while getting inspiration from a range of other artists. Conclude by asking them to consider their preferences when painting with, and without, the use of digital devices.	Promote your learners' understanding of the various aspects of using a computer to create and change text. Learners will familiarise themselves with typing on a keyboard and begin using tools to change the look of their writing, and then they will consider the differences between using a	This unit introduces pupils to data and information. They will begin by using labels to put objects into groups, and labelling these groups. Pupils will demonstrate that they can count a small number of objects, before and after the objects are grouped. They will then begin to demonstrate their ability to sort objects into different groups, based on	This unit introduces learners to early programming concepts. Learners will explore using individual commands, both with other learners and as part of a computer program. They will identify what each floor robot command does and use that knowledge to start predicting the outcome of programs. The unit is	This unit introduces learners to on-screen programming through ScratchJr. Learners will explore the way a project looks by investigating sprites and backgrounds. They will use programming blocks to use, modify, and create programs. Learners will also be

			computer and writing on paper to create text.	the properties they choose. Finally, pupils will use their ability to sort objects into different groups to answer questions about data.	paced to ensure time is spent on all aspects of programming and builds knowledge in a structured manner. Learners are also introduced to the early stages of program design through the introduction of algorithms.	introduced to the early stages of program design through the introduction of algorithms.
	- 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	- Use technology purposefully to create, organise, store, manipulate, and retrieve digital content	-Use technology purposefully to create, organise, store, manipulate, and retrieve digital content -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	-Use technology purposefully to create, organise, store, manipulate, and retrieve digital content -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	-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 -I can identify several possible solutions - I can plan two programs - I can use two different programs to get to the same place -Recognise common uses of information technology beyond school	-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 -I can identify several possible solutions - I can plan two programs - I can use two different programs to get to the same place -Recognise common uses of information technology beyond school

Willow class - (Year 2/3)	Active Bytes Autumn 1 Year 3	Active Bytes Autumn 2 Year 3	Active Bytes Spring 1 Year 3	Active Bytes Spring 2 Year 3	Active Bytes Summer 1 Year 3	Active Bytes Summer 2 Year 3
	<u>Computing systems and networks – Connecting computers</u>	<u>Creating media – Animation</u>	Creating media - Desktop Publishing	<u>Data and information – Branching databases</u>	<u>Programming A – Sequence in music</u>	<u>Programming B – Events and actions</u>
	Challenge your learners to develop their understanding of digital devices, with an initial focus on inputs, processes, and outputs. Start by comparing digital and non-digital devices, before introducing them to computer networks that include network infrastructure devices like routers and switches.	During this unit, learners will use a range of techniques to create a stop frame animation using tablets. Next, they will apply those skills to create a story-based animation. This unit will conclude with learners adding other types of media to their animation, such as music and text.	During this unit, learners will become familiar with the terms 'text' and 'images' and understand that they can be used to communicate messages. They will use desktop publishing software and consider careful choices of font size, colour and type to edit and improve premade documents. Learners will be introduced to the terms 'templates', 'orientation', and 'placeholders' and begin to understand how these can support them in making their own template for a magazine front cover. They will start to add text and images to create their own pieces of work using desktop publishing software. Learners will look at a range of page layouts thinking carefully about the purpose of these and evaluate how and why	During this unit, learners will develop their understanding of what a branching database is and how to create one. They will gain an understanding of what attributes are and how to use them to sort groups of objects by using yes/no questions. The learners will create physical and on-screen branching databases. Finally, they will evaluate the effectiveness of branching databases and will decide what types of data should be presented as a branching database.	This unit explores the concept of sequencing in programming through Scratch. It begins with an introduction to the programming environment, which will be new to most learners. They will be introduced to a selection of motion, sound, and event blocks which they will use to create their own programs, featuring sequences. The final project is to make a representation of a piano. The unit is paced to focus on all aspects of sequences, and make sure that knowledge is built in a structured manner. Learners also apply stages of program design through this unit.	This unit explores the links between events and actions, whilst consolidating prior learning relating to sequencing. Learners will begin by moving a sprite in four directions (up, down, left and right). They will then explore movement within the context of a maze, using design to choose an appropriately sized sprite. This unit also introduces programming extensions, through the use of pen blocks. Learners are given the opportunity to draw lines with sprites and change the size and colour of lines. The unit concludes with learners designing and coding their own maze tracing program.

			desktop publishing is used in the real world.			
	-Use sequence, selection, and repetition in programs; work with variables and various forms of input and output -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 technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact	-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	-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	-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	-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 -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	-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 -Select, use and combine a variety of software (including internet services) on a range of digital

					collecting, analysing, evaluating and presenting data and information	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
Ash class (Year 4/5)	Active Bytes Autumn 1 Year 4	Active Bytes Autumn 2 Year 4	Active Bytes Spring 1 Year 4	Active Bytes Spring 2 Year 4	Active Bytes Summer 1 Year 4	Active Bytes Summer 2 Year 4
	Active byte Year 3 Autumn term A I am kind and responsible – Agreement and kindness	Creating media – Digital photography (2)	ActiveBYTE Year 3: Spring Term A ‘I am Safe and Secure’ Privacy	Data and information – Data logging (4)	Programming B – Repetition in games (4)	Programming B – An introduction to quizzes (2)
	Children will • Talk about the things they do online that they enjoy, and persuade someone else why it's enjoyable • Talk about what concerns their parents might have when they go online or use a device (e.g. mobile phone) • Work in groups to come up with a class agreement to stay safe online • Agree on sanctions for the class online safety agreement	Through the lessons in this unit, learners will learn to recognise that different devices can be used to capture photographs and will gain experience capturing, editing, and improving photos. Finally, they will use this knowledge to recognise that images they see may not be real.	Children will • Play 20 Questions to guess the identity of a staff member, and establish how easy it is to guess someone's identity • Listen to your telling of the CyberPigs story • Talk about how companies collect my personal information, and what they will use it for • Discuss how I can control the personal information I share • Use what they have learned	In this unit, pupils will consider how and why data is collected over time. Pupils will consider the senses that humans use to experience the environment and how computers can use special input devices called sensors to monitor the environment. Pupils will collect data as well as access data captured over long periods of time. They will look at data points, data sets, and logging intervals. Pupils will spend time using a computer to review and analyse data. Towards the end of the unit, pupils will	This unit explores the concept of repetition in programming using the Scratch environment. It begins with a Scratch activity similar to that carried out in Logo in Programming unit A, where learners can discover similarities between two environments. Learners look at the difference between count-controlled and infinite loops, and use their knowledge to modify existing animations and games using repetition. Their final project is to	This unit initially recaps on learning from the Year 1 Scratch Junior unit 'Programming B - Introduction to animation' Learners begin to understand that sequences of commands have an outcome and make predictions based on their learning. They use and modify designs to create their own quiz questions in ScratchJr and realise these designs in ScratchJr using blocks of code. Finally, learners

				pose questions and then use data loggers to automatically collect the data needed to answer those questions.	design and create a game which uses repetition, applying stages of programming design throughout.	evaluate their work and make improvements to their programming projects.
		- 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		-Use sequence, selection, and repetition in programs; work with variables and various forms of input and output -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	-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 -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,	-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
Oak class (Year 5/6)	ActiveBYTE Year 5: Autumn Term A ' I am kind and responsible ' Evaluating content	ActiveBYTE Year 5: Autumn Term B ' I am kind and responsible ' Kindness	ActiveBYTE Year 5: Spring Term A ' I am Safe and Secure ' Privacy	ActiveBYTE Year 5: Spring Term B ' I am Safe and Secure ' Relationships	ActiveBYTE Year 5: Summer Term A ' I am healthy ' Self-image	ActiveBYTE Year 5: Summer Term B ' I am Healthy ' Lifestyle choices

	Children will • Consider video of spaghetti harvest • Practise advanced search techniques • Create a class Online Safety Agreement / Responsible use of technology agreement	Children will • Use drama to explore scenarios which may not obviously be classed as Cyberbullying • Consider who is a bully • Generate a definition of Cyberbullying and agree actions to deal with it	Children will • Watch Episode 1 of CEOP's 'Play Like Share' as an introduction to this focus • Watch an NSPCC video to illustrate the potential risks of sharing a nude photograph online • Role play flash-forward situations to explore potential outcomes of posting a photograph online • Reflect on how these consequences could have been avoided	Children will • Watch an animated film about online safety called 'Play Like Share' from Thinkuknow, the NCA-CEOP Command's education programme. • Use a range of activities to explore the difference between a 'real or 'online only' friend, including tactics which online friends may use to manipulate feelings and behaviour	Children will • Experience a range of videos and photographs which 'faked' or have been altered • Watch a selection of videos and try to work out whether or not they are real • Consider how the media, including people on social media, use digitally altered photos and videos and how these can make us feel about ourselves.	Children will • Learn about how advertising is used to persuade consumers • Complete challenges to understand how advertising is used on the internet • Use what they learn to create their own adverts (Follow-up task)
	Computing Vocabulary	Barefoot computing Pizza Party Spreadsheets	Film making	AI	Programming micro:bit Fastest reactions	Programming micro:bit Against the clock
	Pupils explore key computing vocabulary — algorithm, decomposition, and logical thinking — through an active sequence using dance, real-life problem-solving, and simple game design. They learn how precise instructions work by creating and debugging dance routines, practise breaking down everyday tasks into smaller steps, and apply all three concepts when planning the structure and rules of a game	With Italy as the core theme, pupils will develop their practical computational skills in online research and modelling using spreadsheets. To top things off, they will celebrate their efforts with a class pizza party! PUPIL OBJECTIVES: I can search the internet effectively for information about a topic and have an understanding of copyright I understand how spreadsheets can help me to solve problems, and am familiar with the	This aim of this unit is to allow children to explore various aspects of film-making. In doing so, they must choose and use appropriate software in order to complete tasks such as writing a script, researching information, filming and editing. As well as using digital devices for recording (video camera or tablet), children work through pre- and post-production stages, planning good-quality interviews for a	AI lesson pack is a structured, child-friendly introduction to artificial intelligence, designed to support Computing and Digital Literacy in Key Stage 2. At its core, the pack explains what AI is, how it works, and why it matters, using clear language, colourful visuals, and interactive tasks to keep pupils engaged.	Further development of micro:bit skills. To create a 2-player game to see who has the fastest reactions. The game will work by showing an image after a random amount of time - whoever presses their button first is the winner.	Raspberry pi physical computing. To learn how to make a timer, so that children can use it to challenge their friends

		spreadsheet modelling cycle I can collect and enter data values into a spreadsheet, and predict what a change to a spreadsheet will do I can follow a recipe algorithm to create a pizza I can evaluate my own work, and the work of other pupils	documentary and completing the process with use of video editing software such as Windows Movie Maker.			
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