

**EYFS and KS1 COMPUTING CURRICULUM PROGRESSION MAP**

**Scheme: Teach Computing (NCCE)** *Our intent is for children to be digitally literate and competent users of technology to in order to prepare them to become socially responsible and active participants in an ever-changing digital world. Children will be able to use technology to learn, create, communicate and problem solve.*

	Year R	Year 1	Year 2
<b>Autumn Term 1</b>	<p align="center"><b>Computing Systems and Networks: Technology around us</b></p> <p><b>In this topic, children will learn:</b> In this unit, children will recognise what technology is and what technology they have at home and school. *I can name one example of technology at home or school.</p>	<p align="center"><b>Computing Systems and Networks : Technology around us</b></p> <p><b>In this topic, children will learn:</b> In this unit, children will develop their understanding of technology and how it can help them in their everyday lives. They will start to become familiar with the different components of a computer by developing their keyboard and mouse skills. Learners will also consider how to use technology responsibly and who to ask for help if they see any content or comments online that make them feel uncomfortable. *I can recognise technology in school and use it responsibly.</p>	<p align="center"><b>Computing Systems and Networks : Technology around us</b></p> <p><b>In this topic, children will learn:</b> In this unit, children will develop their understanding of what information technology (IT) is and will begin to identify examples. They will discuss where they have seen IT in school and beyond, in settings such as shops, hospitals, and libraries. Children will then investigate how IT improves our world, and they will learn about the importance of using IT responsibly. *I can identify IT and how its responsible use improves our world in school and beyond.</p>
<b>Autumn Term 1 Online Safety</b>	<p align="center"><b>Online Safety – Internet Safety</b> <b>Set class rules</b></p> <p>All children to identify trusted adults to talk to in real life and online. *I can name one trusted adult at home and school.</p>	<p align="center"><b>Online Safety</b> <b>Review KS1 AUP</b></p> <p>All children to know the rules for staying safe online and identify trusted adults to talk to. *I can name two trusted adults at home and school.</p>	<p align="center"><b>Online Safety</b> <b>Review KS1 AUP</b></p> <p>All children to know the rules for staying safe online and identify trusted adults to talk to. *I can name two trusted adults at home and school.</p>
<b>Autumn Term 2</b>	<p align="center"><b>Creating Media</b></p> <p><b>In this topic, children will learn:</b> Pupils will make simple marks on a device using a painting tool. *I can use a device to make simple marks.</p>	<p align="center"><b>Creating Media: Digital painting</b></p> <p><b>In this topic, children will learn:</b> In this unit, children will develop their understanding of a range of tools used for digital painting. They then use these tools to create their own digital paintings, while gaining inspiration from a range of artists’ work. The unit concludes with learners considering their preferences when painting with and without the use of digital devices. *I can choose appropriate tools in a program to create art and make comparisons with working non-digitally.</p>	<p align="center"><b>Creating Media: Digital photography</b></p> <p><b>In this topic, children will learn:</b> 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. *I can capture and change digital photographs for different purposes.</p>
<b>Autumn Term 2 Online Safety</b>	<p align="center"><b>Online Safety</b></p> <p>*I understand what cyberbullying is and who I can talk to.</p>	<p align="center"><b>Online Safety</b></p> <p>*I understand what to do if there are pop ups and in app purchasing. *I understand what cyberbullying is and who I can talk to.</p>	<p align="center"><b>Online Safety</b></p> <p>*I understand what to do if there are pop ups and in app purchasing. *I understand what cyberbullying is and who I can talk to.</p>
<b>Spring Term 1</b>	<p align="center"><b>Programming A</b></p> <p><b>In this topic, children will learn:</b>In this unit, children will know how to use simple instructions with a BeeBot and a code-a-pillar. *I can move a code-a-pillar in two ways.</p>	<p align="center"><b>Programming A: Moving a robot</b></p> <p><b>In this topic, children will learn:</b> In this unit, children will be introduced to early programming concepts. Children will explore using individual commands, both with other pupils and as part of a computer program. They will identify what each command for the floor robot does, and use that knowledge to start predicting the outcome of programs. The unit is paced to ensure time is spent on all aspects of programming, and builds knowledge in a structured</p>	<p align="center"><b>Programming A: Robot algorithms</b></p> <p><b>In this topic, children will learn:</b> In this unit, children develop an understanding of instructions in sequences and the use of logical reasoning to predict outcomes. Pupils will use given commands in different orders to investigate how the order affects the outcome. They will also learn about design in programming. They will develop artwork and test</p>

		<p>manner. Pupils are also introduced to the early stages of program design through the introduction of algorithms.</p> <p><b>* I can write short algorithms and programs for floor robots and predict program outcomes.</b></p>	<p>it for use in a program. They will design algorithms and then test those algorithms as programs and debug them</p> <p><b>*I can create and debug programs and use logical reasoning to make predictions.</b></p>
Spring Term 1 Online Safety	<u>Internet Safety Day</u>	<u>Internet Safety Day</u>	<u>Internet Safety Day</u>
Spring Term 2	<p><b>Data and Information</b></p> <p><b>In this topic, children will learn:</b> In this unit, children will make simple groups and begin to label them.</p> <p><b>*I know that things can be labelled, grouped or compared.</b></p>	<p><b>Data and information - Grouping data</b></p> <p><b>In this topic, children will learn:</b> This unit introduces children to data and information. Labelling, grouping, and searching are important aspects of data and information. Searching is a common operation in many applications, and requires an understanding that to search data, it must have labels. This unit of work focuses on assigning data (images) with different labels in order to demonstrate how computers are able to group and present data.</p> <p><b>*I can explore object labels and use them to sort and group objects by properties.</b></p>	<p><b>Data and Information - Pictograms</b></p> <p><b>In this topic, children will learn:</b> In this unit, children will begin to understand what the term data means and how data can be collected in the form of a tally chart. They will learn the term 'attribute' and use this to help them organise data. They will then progress onto presenting data visually using software. Learners will use the data presented to answer questions</p> <p><b>*I can collect data in tally charts and organise and present data on a computer.</b></p>
Spring Term 2 Online Safety	<p><u>Online Safety</u></p> <p>*I can speak out and get help for things that I have seen in real life and online.</p>	<p><u>Online Safety</u></p> <p>*I know how to be a good friend online.</p>	<p><u>Online Safety</u></p> <p>*I know how to be a good friend online.</p>
Summer Term 1	<p><b>Creating Media</b></p> <p><b>In this topic, children will learn:</b> In this unit, children will start to explore a keyboard and begin to take a photograph with a device.</p> <p><b>*I know and can use some letters on a keyboard.</b></p>	<p><b>Creating Media - Digital Writing</b></p> <p><b>In this topic, children will learn:</b> Learners will develop their understanding of the various aspects of using a computer to create and manipulate text. They will become more familiar with using a keyboard and mouse to enter and remove text. Learners will also consider how to change the look of their text, and will be able to justify their reasoning in making these changes. Finally, learners will consider the differences between using a computer to create text, and writing text on paper. They will be able to explain which method they prefer and explain their reasoning for choosing this.</p> <p><b>*I can use a computer to create and format text before comparing to writing non - digitally.</b></p>	<p><b>Creating Media - Digital Music</b></p> <p><b>In this topic, children will learn:</b>In this unit, learners will listen to a variety of pieces of music and consider how music can make them think and feel. Learners will compare creating music digitally and non-digitally. Learners will look at patterns and purposefully create music.</p> <p><b>*I can use a computer as a tool to explore rhythms and melodies before creating a musical composition.</b></p>
Summer Term 1 Online Safety	<p><u>Online Safety</u></p> <p>*I know how to be a good friend online.</p>	<p><u>Online Safety</u></p> <p>*I understand critical thinking and reliability online.</p>	<p><u>Online Safety</u></p> <p>*I understand peer pressures, password sharing and in-app purchasing.</p>
Summer Term 2	<p><b>Programming B</b></p> <p><b>In this topic, children will learn:</b> In this unit, children will learn to sequence simple stories.</p>	<p><b>Programming B - Programming animations</b></p> <p><b>In this topic, children will learn:</b> In this unit, children will be introduced to on-screen programming through ScratchJr. Learners will explore the way a project looks by investigating sprites and</p>	<p><b>Programming B -Programming quizzes</b></p> <p><b>In this topic, children will learn:</b> This unit initially recaps on learning from the Year 1 ScratchJr unit 'Programming B – Programming animations'.</p>

	<p><b>*I can order and sequence a range of things including stories.</b></p>	<p>backgrounds. They will use programming blocks to use, modify, and create programs. Learners will also be introduced to the early stages of program design through the introduction of algorithms.</p> <p><b>*I can design and program the movement of a character on screen to tell stories.</b></p>	<p>Children 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 evaluate their work and make improvements to their programming projects.</p> <p><b>*I can design algorithms and programs that use events to trigger sequences of code to make an interactive quiz.</b></p>
<p><b>Summer Term 2 Online Safety</b></p>	<p style="text-align: center;"><b>Online Safety</b></p> <p>*I understand what we use the internet for.</p>	<p style="text-align: center;"><b>Online Safety</b></p> <p>*I understand the reliability of online information and how to check information.</p>	<p style="text-align: center;"><b>Online Safety</b></p> <p>*I understand the positive uses of the internet to help others.</p>
<p><b>NC End of Key Stage Expectations</b></p>	<p><b>By the end of EYFS:</b></p> <p>Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.</p>	<p><b>By the end of KS1 children should be taught to:</b></p> <ul style="list-style-type: none"> <li>● Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.</li> <li>● Create and debug simple programs.</li> <li>● Use logical reasoning to predict the behaviour of simple programs.</li> <li>● Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</li> <li>● Recognise common uses of information technology beyond school.</li> <li>● Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</li> </ul>	