



Computing
Whole School Overview

Year 1					
Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p>NCCCE Unit 1 Technology around us</p> <p>Learners will develop their understanding of technology and how it can help them in their everyday lives.</p>	<p>NCCCE Unit 3 Programming A - Moving a robot</p> <p>Learners are introduced early programming concepts</p>	<p>NCCCE unit 4 data and information</p> <p>This unit introduces learners to data and information.</p>	<p>NCCCE Unit 6 Programming B - Introduction to animation</p> <p>Learners are introduced to on screen programming through ScratchJr</p>	<p>NCCCE unit 5 creating media digital writing</p> <p>Learners will develop their understanding of the various aspects of using a computer to create and manipulate text.</p>	<p>NCCCE unit 2. Creating media – Digital painting</p> <p>Learners will develop their understanding of a range of tools used for digital painting.</p>



Year 2

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p>NCCE Unit 1 Computing systems & networks - IT around us</p> <p>Learners will look at information technology at school and beyond, in settings such as shops, hospitals, and libraries</p>	<p>NCCE Unit 3 Programming A – Robot algorithms</p> <p>Develops learners' understanding of instructions in sequences and the use of logical reasoning to predict outcomes.</p>	<p>NCCE Unit 4 Data and information – Pictograms</p> <p>Learners will begin to understand what the term data means and how data can be collected in the form of a tally chart.</p>	<p>NCCE Unit 6 Programming B - programming quizzes</p> <p>initially recaps on learning from the Year 1 ScratchJr unit 'Programming B – Programming animations'. Learners begin to understand that sequences of commands have an outcome, and make predictions based on their learning.</p>	<p>NCCE Unit Creating media - Digital photography</p> <p>Recognise that different devices can be used to capture photographs and will gain experience capturing, editing, and improving photos</p>	<p>NCCE Unit 5 - Creating media - Digital music</p> <p>Learners will be using a computer to create music. They 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>



Year 3					
Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p><u>NCCE Unit Computing systems and networks – Connecting computers</u></p> <p>Learners will develop their understanding of digital devices, with an initial focus on inputs, processes, and outputs.</p>	<p><u>NCCE Unit Creating media -Stop - Frame- Animation</u></p> <p>Learners will use a range of techniques to create a stop frame animation using iPads</p>	<p><u>NCCE Unit Programming A - Sequence in music</u></p> <p>Learners begin to learn the concept of sequencing in programming through Scratch</p>	<p><u>NCCE Unit Data & information -Branching databases</u></p> <p>Learners develop their understanding of what a branching database is and how to create one</p>	<p><u>NCCE Unit - Creating media – Desktop publishing</u></p> <p>Learners will become familiar with the terms ‘text’ and ‘images’ and understand that they can be used to communicate messages.</p>	<p><u>NCCE Unit - Programming B - Events and actions in programs</u></p> <p>Learners will begin by moving a sprite in four directions (up, down, left and right).</p>



Year 4					
Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p><u>NCCE Unit Computing systems & networks -The internet</u></p> <p>Learners will apply their knowledge and understanding of networks, to appreciate the internet as a network of networks which need to be kept secure.</p>	<p><u>NCCE Unit Creating media -Audio production</u></p> <p>Learners will identify the input device (microphone) and output devices (speaker or headphones) required to work with sound digitally.</p>	<p><u>NCCE Unit - Programming A – Repetition in shapes</u></p> <p>Learners will create programs by planning, modifying, and testing commands to create shapes and patterns.</p>	<p><u>NCCE Unit - Data and information – Data logging</u></p> <p>Learners will consider how and why data is collected over time. Learners will consider the senses that humans use to experience the environment.</p>	<p><u>NCCE Unit Creating media -Photo editing</u></p> <p>How digital images can be changed and edited, and how they can then be resaved and reused</p>	<p><u>NCCE Unit - Programming B – Repetition in games</u></p> <p>Learners will explore the concept of repetition in programming using the Scratch environment.</p>



Year 5

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p><u>NCCE Unit Computing systems and networks - Systems and searching</u> Learners develop their understanding of computer systems and how information is transferred between systems and devices.</p>	<p><u>NCCE Unit Creating media - Vector drawing</u> Introduction to vector drawings and how they are made of shapes</p>	<p><u>NCCE Unit Data & information -Flat-file databases</u> How a flat-file database can be used to organise data in records</p>	<p><u>NCCE Unit Creating media - Video production</u> This unit gives learners the opportunity to learn how to create short videos in groups. As they progress through this unit, they will be exposed to topic-based language and develop the skills of capturing, editing, and manipulating video.</p>	<p><u>NCCE Unit Programming A – Selection in physical computing</u> In this unit, learners will use physical computing to explore the concept of selection in programming through the use of the Crumble programming environment.</p>	<p><u>NCCE Unit Programming B - Events and actions in programs</u> This unit explores the links between events and actions, whilst consolidating prior learning relating to sequencing.</p>



Year 6					
Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
		<u>NCCE Unit Creating media -Web page creation</u> Creating a website for a chosen purpose		<u>NCCE Unit: Programming B- Sensing movement</u>	
<u>NCCE Unit: Computing systems and networks- Communication and collaboration</u>		<u>NCCE Unit Programming A -Variables in Games</u> Introduction to the concept of variables in programming through games in Scratch		<u>NCCE Unit: Data and information- Introduction to spreadsheets.</u>	
<u>NCCE Unit Creating media -3D modelling</u> Using a computer to produce 3D models					