



1/2 A	<b>Computer systems and networks – IT and Technology around us</b>	<b>Creating Media – Digital Painting</b>	<b>Programming A – Programming a robot</b>	<b>Data and information – Grouping data and Pictograms</b>	<b>Creating media – Digital Photography</b>	<b>Programming A – Robot Algorithms</b>
Progression	This combines the year 1 and year 2 units for ‘computer systems and networks’ from Teach Computing and the same pieces of procedural and declarative knowledge are taught in both cycles due to the importance of the knowledge: underpinning the rest of the computing curriculum. It is expected that by the end of year 2 all children will know and remember the key knowledge outlined.	Learners should be familiar with:  How to switch their device on  Usernames  Passwords  Learners have benefited from completing the Year 1 Computing Systems & Networks unit prior to this unit.	This unit helps to build students’ knowledge and understanding of giving and following instructions. It moves from giving instructions to each other to giving instructions to a robot by programming it.	This combines the year 1 and 2 Data and Information Units. Some of the year 1 objectives are covered within the EYFS White rose maths curriculum and have therefore been combined. To extend year 2 an additional WALT has been added to help move their learning forward further. The children will revisit the same key knowledge again in the next cycle with the aim that the children will know and remember the key knowledge by the end of year 2.	This unit begins the learners’ understanding of how photos are captured and can be manipulated for different purposes. Following this unit, learners will develop their photo editing further in KS2.	The lessons in this unit build upon Programming A – Programming a robot. Pupils have had some experience of creating short programs and predicting the outcome of a simple program. This unit progresses students’ knowledge and understanding of algorithms and how they are implemented as programs on digital devices. Pupils will spend time looking at how the order of commands affects outcomes. Pupils will use this knowledge and logical reasoning to trace programs and predict outcomes.

1/2 B	<b>Computer systems and networks – IT and Technology around us</b>	<b>Creating Media – Digital Writing</b>	<b>Programming B – Introduction to Animation</b>	<b>Data and information – Grouping data and Pictograms</b>	<b>Creating Media – Making Music</b>	<b>Programming B - Quizzes</b>
Progression	This combines the year 1 and year 2 units for ‘computer systems and networks’ and the same pieces of procedural and declarative knowledge are taught in both cycles due to the importance of the knowledge: underpinning the rest of the computing curriculum. It is expected that by the end of year 2 all children will know and remember the key knowledge outlined.	This unit progresses students’ knowledge and understanding of using computers to create and manipulate digital content, focussing on using a word processor. The learners will develop their ability to find and use the keys on a keyboard in order to create digital content. The learners are then introduced to manipulating the resulting text, making cosmetic changes, and justifying their reason for making these changes.	This unit introduces programming in the Scratch Jnr environment. It supports learners in how to provide a set of instructions/commands to create a programme. They will need some prior knowledge on giving sets of instructions.	This combines the year 1 and 2 Data and Information Units. Some of the year 1 objectives are covered within the EYFS White rose maths curriculum and have therefore been combined. To extend year 2 an additional WALT has been added to help move their learning forward further. The children will revisit the same key knowledge again in the next cycle with the aim that the children will know and remember the key knowledge by the end of year 2.	Learners will have experience of making choices on a tablet/computer, and they will be able to navigate within an application. Learners will also have some experience of patterns.  This unit progresses students’ knowledge through listening to music and considering how music can affect how we think and feel. Learners will then purposefully create rhythm patterns and music.	This unit progresses learners’ knowledge and understanding of instructions in sequences and the use of logical reasoning to predict outcomes.

3/4 A	<b>Computer Systems and Networks – Connecting Computers and the Internet</b>	<b>Creating Media –Frame Animation</b>	<b>Programming A – Sequencing sounds</b>	<b>Data – Branching Database</b>	<b>Creating Media – Audio Production</b>	<b>Programming A – Repetition in shapes</b>
Progression	This combines the year 3 and year 4 units for ‘computer systems and networks’ from Teach Computing and the same pieces of procedural and declarative knowledge are taught in both cycles due to the importance of the knowledge: underpinning the rest of the computing curriculum. It is expected that by the end of year 4 all children will know and remember the key knowledge outlined.	This unit progresses students’ knowledge and understanding of using digital devices to create media, exploring how they can create stop-frame animations. Following this unit, learners will further develop their video editing skills in UKS2	This unit assumes that learners will have some prior experience of programming; the KS1 NCE units cover floor robots and ScratchJr.	This unit progresses students’ knowledge and understanding of presenting information. It builds on their knowledge of data and information from key stage 1. They continue to develop their understanding of attributes and begin to construct and interrogate branching databases as a means of displaying and retrieving information.	This unit progresses students’ knowledge and understanding of creating media, by focusing on the recording and editing of sound to produce a podcast. Following this unit, learners will explore combining audio with video in the ‘Video editing’ unit in UKS2	This unit progresses students’ knowledge and understanding of programming. It progresses from the sequence of commands in a program to using count-controlled loops. Pupils will create algorithms and then implement those algorithms as code.

3/4 B	<b>Computer Systems and Networks – Connecting Computers and the Internet</b>	<b>Creating Media – Desktop Publishing</b>	<b>Programming B – Events and Actions</b>	<b>Data - Datalogging</b>	<b>Creating media – Photo editing</b>	<b>Programming B – Repetition in Games</b>
Progression	This combines the year 3 and year 4 units for ‘computer systems and networks’ from Teach Computing and the same pieces of procedural and declarative knowledge are taught in both cycles due to the importance of the knowledge: underpinning the rest of the computing curriculum. It is expected that by the end of year 4 all children will know and remember the key knowledge outlined.	This unit progresses learners’ knowledge and understanding of using digital devices to combine text and images building on work from the following units; Digital Writing Year 1, Digital painting Year 1, and Digital Photography Year 2.	This unit assumes that learners will have some prior experience of programming. The key stage 1 National Centre for Computing Education units focus on floor robots and ScratchJr,	This unit progresses pupils’ knowledge and understanding of data and how it can be collected over time to answer questions. The unit also introduces the idea of automatic data collection.	Learners should have experience of making choices on a tablet/computer. They should be able to navigate within an application.  This unit progresses students’ skills through editing digital images and considering the impact that editing can have on an image. Learners will also consider how editing can be used appropriately for different scenarios, and create and evaluate ‘fake’ images, combining all of their new skills.	This unit assumes that learners will have some prior experience of programming. The KS1 NCE units cover floor robots and ScratchJr, and Scratch has been introduced earlier in the year and in the previous cycle for Year 4

5/6 A	<b>Computer Systems and networks – Systems, searching, communication and collaboration</b>	<b>Creating media – Video Production</b>	<b>Programming A – Selection in physical computing</b>	<b>Data and information – Flat File databases</b>	<b>Programming A – Variables in games</b>	<b>Data and information - Spreadsheets</b>
Progression	This combines the year 5 and year 6 units for ‘computer systems and networks’ from Teach Computing and the same pieces of procedural and declarative knowledge are taught in both cycles due to the importance of the knowledge: underpinning the rest of the computing curriculum. It is expected that by the end of year 6 all children will know and remember the key knowledge outlined.	This unit progresses learners’ knowledge and understanding of creating media by guiding them systematically through the process involved in creating a video. By the end of the unit, learners will have developed the skills required to plan, record, edit, and finalise a video.	This unit assumes that learners will have prior experience of programming using block-based construction (eg Scratch) and understand the concepts of sequence and repetition.	This unit progresses pupils’ knowledge and understanding of why and how information might be stored in a database, and looks at how tools within a database can help us to answer questions about our data. It moves on to demonstrate how a database can help us display data visually, and how real-life databases can be used to help us solve problems. Finally, the pupils create a presentation showing understanding and application of all the tools used within the unit.	This unit assumes that pupils will have some prior experience of programming in Scratch. Specifically, they should be familiar with the programming constructs of sequence, repetition, and selection. These constructs are covered in the Year 3, 4 National Centre for Computing Education programming units respectively. Each year group includes at least one unit that focuses on Scratch.	This unit progresses students’ knowledge and understanding of data, and teaches them how to organise and modify data within spreadsheets.

5/6	<b>Computer systems and networks – Systems, searching, communication and collaboration</b>	<b>Creating media – Introduction to vector graphics</b>	<b>Programming B – Selection in</b>	<b>Creating media – Web page creation</b>	<b>Programming B – Sensing Movement</b>	<b>Creating media – 3D modelling</b>
Progression	This combines the year 5 and year 6 units for ‘computer systems and networks’ from Teach Computing and the same pieces of procedural and declarative knowledge are taught in both cycles due to the importance of the knowledge: underpinning the rest of the computing curriculum. It is expected that by the end of year 6 all children will know and remember the key knowledge outlined.	This unit progresses students’ knowledge and understanding of digital painting and has some links to desktop publishing in which learners used digital images. They are now creating the images that they could use in desktop publishing documents.	This unit assumes that learners will have prior experience of programming using block-based construction (eg Scratch), understand the concepts of ‘sequence’ and ‘repetition’, and have some experience of using ‘selection’.	This unit progresses students’ knowledge and understanding of the following: digital writing, digital painting, desktop publishing, digital photography, photo editing, and vector drawing.	This unit presumes that learners are already confident in their understanding of sequence, repetition and selection independently within programming.	This unit progresses students’ knowledge and understanding of creating 3D graphics using a computer. Prior to undertaking this unit, learners should have worked with 2D graphics applications.