

Wrawby St Mary's Computing Long Term Plan - NCCE Teach Computing Docs Cycle B 2026-27

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception Cycle B	Introduction to ipads – how to handle them, turn them on and off. QR codes – what they are and how to use them. Camera app to scan QR codes to link to a story to listen to. Headphones. Paint Sparkle – letter formation	Ipads available in continuous provision (at selected times only in keeping with latest guidance) to use QR codes to link to stories, phonics games and maths games. Camera – take photos of seasonal changes				
		Paint Sparkle – letter formation, write name, write CVC words.	Follow instructions to move forwards, backwards and turn to the right and left. Introduction to beebots – what they are and what they can do. Explore the buttons on a beebot.	Camera app on ipad to take photos of their work in construction and dough Beebots - simple instructions to get from one place to another. Build up to sequencing two or three instructions together. Bee bot mats.	Camera app to take photos outside the classroom, e.g. signs of Spring	Introduction to laptops – what they are, what we use them for and how. Turn on and off. Insert login username and password (buddy up with a Year 1 child to gain confidence using the keyboard)
Preparing for: Bespoke to the School:	Preparing for taking photos in Summer 2 and preparation for being able to load an app to follow learning in the Year 1 Programming B unit which uses Scratch Junior. The stories selected and loaded using the QR codes will broaden the range of stories that the children engage with, including stories from different cultures which is important as the school is predominantly white British.	Digital painting in Year 1 which will require the use of the touchscreen laptops. It is important for the children at this stage to be able to feel the shape of the letter formation as some children will not be ready, or feel comfortable, holding a writing implement yet.	Preparing for Spring 2 where children will progress from programming single instructions to a short sequence. Children need to be able to physically move the robot before being able to move an onscreen robot.	Preparing for programming longer sequences in the Year 1 Programming A unit, moving a robot. Children need to be able to physically move the robot before being able to move an onscreen robot.	Preparation for using iPads to take photos in other curriculum areas throughout their future years at school. Some children will have explored their family mobile devices at home but may not have actually considered what they are taking photos of and how to make sure that the subject can be seen clearly in the screen shot. Some families will not have let their children explore mobile devices at home before.	Preparation for logging into laptops in preparation for the Year 1 units which require the use of a laptop. Many families have access to mobile devices at home but may not be familiar with using a physical keyboard, not an onscreen touchscreen keyboard.

Year 1 Cycle B	Y1 Computing systems and networks – Technology around us	Y1 Creating media – Digital painting <i>Link to Artist work – Mondrian; primary colours; self-portraits</i>	Y1 Programming A – Moving a robot	Y1 Data and information – Grouping data	Y1 Creating media – Digital writing	Y1 Programming B – Programming animations
Previous learning: Preparing for: Bespoke to the School:	Builds upon use of technology with the foundation stage. Digital resources within role play areas. Link to the History within the 2-year cycle teaching units where possible in the following term. Also introduces key parts of digital devices such as laptops and desktop computers. The school's context would indicate families have access to the digital world – therefore a separate e-safety programme is delivered half termly	Builds upon previous mark making and painting skills in the foundation stage. Also build upon the keyboard and mouse skills created in the tech around us unit Autumn 1. Link to Art within the 2-year cycle where possible eg study of an artist Georgia O'Keefe Preparing for later units using Paint packages e.g. Year 3 Connecting computers lesson 3. Creates another retrieval link and cross curricular link to other curricular subjects (Art).	Builds upon floor robots used in Foundation stage, instructional vocabulary and route planning using the big map. Preparing for future programming units through understanding the direction of forwards, backwards and left and right turns. Understanding of sequencing and debugging. Linked to the World of Work and the business links through emerging knowledge of how robots and machines are programmed through coding.	Builds upon grouping counting and comparing objects within the foundation year groups. Builds upon the mouse skills taught within previous units of this year. Prepares or the later units of spreadsheets and databases. In Y2 this is built upon further through the Pictograms units. Supporting maths on entry to primary school .	Builds upon initial mark marking and writing with meaning in the foundation stage. All future learning using digital technologies e.g. use of mouse and keyboard and entering and manipulation of the text created. Prepares for the Y3 Desktop publishing unit and Y6 Web development unit. The first steps into transferable skills within digital presentation for the world of work.	Builds upon floor robots used in Foundation stage, instructional vocabulary and route planning using the big map. Also builds upon NCCE Y1 Programming A Unit Moving a Robot. Preparing for future programming units through the introduction e.g. programming blocks and vocabulary in Scratch jnr. Linked to the World of Work and the business links through emerging knowledge of how robots and machines are programmed through coding.

Year 2/3 Cycle B	Y2 Creating media - Digital Photography <i>Link to Art – self portraits</i>	Y2 Computing systems and networks – IT around us	Y2 Programming A – Robot Algorithms	Y3 Creating media - Stop Frame Animation Link to relevant curriculum area	Y3 Computing systems and networks - Connecting Computers	Y3 Programming A – Sequencing Sounds
Previous learning: Preparing for: Bespoke to the School:	Builds upon the creating media units from Y1 and the self-portraits completed in art lessons in the previous term. Retrieves skills of saving and retrieving files. Prepares learners for the new skills to be taught in Y4 in the Photo Editing Unit. School spiral curriculum is based on the science of learning principles. This unit's skill will be revisited in Y4 to allow retrieval.	Builds upon knowledge gained in the previous year's Technology Around Us unit. Prepares children for future NCCE computing units e.g. Connecting Computers in Y3. Social context – helping children understand how rules can keep us safe and healthy in and beyond the home when using technology.	Builds upon previous Y1 programming skills and creation of short algorithms and prediction of the outcomes. Preparing for the Programming unit B. Introduction to the PRIMM model. Links to the World of work and how coding is used in industry -	Builds upon previous Y2 unit of digital photography and use of apps on iPads. Also builds upon Literacy skills of narrative writing with plot, conflict and resolution. Possible links to Romans in History. Prepares for video editing skills in Y5 unit. Connected to issues such as plagiarism and fits well into the school's Christian values	Builds upon the learning of Information Technology Around Us Y2 and Technology around us Y1. Prepares for the following years units on networks and sharing information. Number and place value skills and improvement in mastery of art and design techniques. Forms part of the whole school vision through understanding how the World of Work uses technology and how we are all part of a connected world.	Builds upon the use of floor robots in KS1, skills of block coding through scratch taught in Y2. Also builds upon music skills and the making music unit in Y2. Preparing for the new programming blocks in Y3 Programming B. Access to the arts through coding fits well with the whole school vision of empowering the pupils and ensuring that all are privileged.

Year 4/5 Cycle B	Y4 Computing systems and networks - The internet	Y4 Programming A - Repetition in shapes	Y4 Creating media – Audio production	Y5 Computing systems and networks – Systems and searching	Y5 Programming A – Selection in quizzes	Y5 Creating media – Video production
Previous learning: Preparing for: Bespoke to the School:	Builds upon technology around us units from KS1 and particularly Connecting Computers unit in Y3. Prepares for further investigation of computing networks in Y5 Sharing information and Y6 Communication Units. Also prepares children to evaluate online information and the effect that ‘Fake News’ can have. Links well to the vision and values of the school. Follows the science of learning principles by revisiting learning. Transferable life skills of evaluating and interrogating information given rather than just accepting it.	Builds upon Programming units from previous years from block coding in Scratch from Y3. Also builds upon previous work on shape and space in maths and art knowledge and understanding. Prepares for further programming units as well as future use of coding including writing own code. Introduces the loops as a way of repeating own algorithms. Structure of the NCCE unit is built around the science of learning principles which the school follows, reducing cognitive overload. Key block skills are revisited and then progressed through writing of own code. Follows a PRIM structure.	Builds upon children’s understanding of using different apps and technologies, their knowledge and understanding of the music curriculum and vocabulary. Prepares for the Science unit of sound in the following term and skills could be applied in the Y5 NCCE Video Editing unit. The unit links to the World of Work and job varieties and opportunities available in the wider world beyond the immediate locality of the school – widens horizons.	Builds upon the previous programming and coding NCCE units before introducing the ‘if / then’ block and links to the Design and make assignments within the Y5 Design and Technology Curriculum. Also links to science K & U within electrical circuits. Prepares for future programming units in Y5 but particularly the Y6 unit Programming B Sensing where new skills learnt will be applied. Links to the World of Work. Structure of the NCCE unit is built around the science of learning principles which the school follows, reducing cognitive overload. Follows a PRIM structure and recent relevant research has been used to develop the best pedagogy for the unit. Huge Vocab opportunity.	Builds upon the previous programming and coding NCCE units before introducing the ‘if / then’ block and links to the Design and make assignments within the Y5 Design and Technology Curriculum. Also links to science K & U within electrical circuits. Prepares for future programming units in Y5 but particularly the Y6 unit Programming B Sensing where new skills learnt will be applied. Links to the World of Work. Structure of the NCCE unit is built around the science of learning principles which the school follows, reducing cognitive overload. Follows a PRIM structure and recent relevant research has been used to develop the best pedagogy for the unit. Huge Vocab opportunity.	Builds upon the knowledge and understanding of the Y4 unit Photo Editing and Y3 Stop Frame Animation Unit. Prepares for future learning about Video creation and presenting information in digital formats. The unit allows excellent cross curricular links with the History coverage in this year group, application of the science of learning principles of revisiting learning and core concepts within science through a digital platform. *Intention to link with World of Work curriculum. Coding Club (seeking funding STEM/WiME to have coding club with the intent of attracting more females into this area of work.

Year 5/6 Cycle B	Y5 Computing systems and networks – Systems and searching	Y5 Programming A – Selection in quizzes	Y5 Creating media – Video production	Y6 Computing systems and networks – Communication and collaboration	Y6 Programming A – Variables in games	Y6 Creating media - Web page creation
Previous learning: Preparing for: Bespoke to the School:	Builds upon the previous programming and coding NCCE units before introducing the 'if / then' block and links to the Design and make assignments within the Y5 Design and Technology Curriculum. Also links to science K & U within electrical circuits. Prepares for future programming units in Y5 but particularly the Y6 unit Programming B Sensing where new skills learnt will be applied. Links to the World of Work. Structure of the NCCE unit is built around the science of learning principles which the school follows, reducing cognitive overload. Follows a PRIM structure and recent relevant research has been used to develop the best pedagogy for the unit. Huge Vocab opportunity.	Builds upon the previous programming and coding NCCE units before introducing the 'if / then' block and links to the Design and make assignments within the Y5 Design and Technology Curriculum. Also links to science K & U within electrical circuits. Prepares for future programming units in Y5 but particularly the Y6 unit Programming B Sensing where new skills learnt will be applied. Links to the World of Work. Structure of the NCCE unit is built around the science of learning principles which the school follows, reducing cognitive overload. Follows a PRIM structure and recent relevant research has been used to develop the best pedagogy for the unit. Huge Vocab opportunity.	Builds upon the knowledge and understanding of the Y4 unit Photo Editing and Y3 Stop Frame Animation Unit. Prepares for future learning about Video creation and presenting information in digital formats. The unit allows excellent cross curricular links with the History coverage in this year group, application of the science of learning principles of revisiting learning and core concepts within science through a digital platform. *Intention to link with World of Work curriculum. Coding Club (seeking funding STEM/WiME to have coding club with the intent of attracting more females into this area of work.	Builds upon previous Networking units completed in Y4 and Y5. Prepares for further networking education within computing at KS3 and gives an entry level understanding of networks and how the internet works. Links to the World of Work concepts of collaborative working, transferable life skills.	Builds upon prior learning and understanding of programming and coding units through Scratch. Prepares for Further Programming Units in Y6. Also prepares for future programming and coding within KS3 and KS4 and beyond in the world of work. Links to the World of Work. Structure of the NCCE unit is built around the science of learning principles which the school follows, reducing cognitive overload. Follows a PRIM structure and recent relevant research has been used to develop the best pedagogy for the unit. Huge Vocab opportunity.	Builds upon and allows transference of skills the video editing unit in Y5, and Audio Production units in Y4 along with all other units including digital writing, painting, publishing, photography and vector drawing. Prepares for future learning about web page development in KS3 and KS4. The unit allows excellent cross curricular links with the History coverage in this year group, application of the science of learning principles of revisiting learning and core concepts within science through a digital platform.

Units may be moved within the year to make use of links to other curriculum areas.