**Computing at West Kidlington Primary School and Nursery 2023-2024: Curriculum Progression**

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|  | **Year 1/2** | **Year 3/4** | **Year 5/6** |
| **Computing Systems & Networks** | ***Digital Literacy: networks Describe common uses of information technology beyond school.*****NCCE Information technology around us** Identifying IT and how its responsible use improves our world in school and beyond. | ***Digital Literacy: networks Understand how computer networks can provide multiple services, such as the world wide web History of internet.*****NCCE The internet** Recognising the internet as a network of networks including the WWW, and why we should evaluate online content. | ***Digital Literacy: networks Understands the basic workings of computer networks including internet What is world wide web?*****NCCE Communication and collaboration** Identifying and exploring how data is transferred and information is shared online. |
| **Creating Media** | ***Information Technology: create digital content Use technology to manipulate digital content.*****NCCE Digital photography** Capturing and changing digital photographs for different purposes. | ***Information Technology: create digital content Create content to accomplish a goal.*****NCCE Audio production** Capturing and editing audio to produce a podcast, ensuring that copyright is considered. | ***Information Technology: create digital content Combine a variety of software to accomplish given goals on a range of digital devices.*****NCCE Webpage creation** Designing and creating webpages, considering copyright, aesthetics, and navigation. |
| **Programming A** | ***Computer Science: algorithms and logical reasoning Can use logical reasoning to predict the behaviour of simple programs Understands what algorithms are and that they are implemented as programs on devices.*****NCCE Robot algorithms** Creating and debugging programs and using logical reasoning to make predictions. | ***Computer Science: write and debug programs Use repetition in programs.*****NCCE Repetition in shapes**Using a text-based programming language to explore count-controlled loops when drawing shapes. | ***Computer Science: write and debug programs Work with variables.*****NCCE Variables in games** Exploring variables when designing and coding a game. |
| **Data & Information** | ***Information Technology: information and data Use technology to retrieve digital content.******Basic skills – logging on, opening files, saving in correct folder Create a Branching database using hyperlinks in a PowerPoint Kahoot for data collection Unplugged - Modify/improve a pictogram.*****NCCE Pictograms** Collecting data in tally charts and using attributes to organise and present data on a computer. | ***Information Technology: information and data Can combine information and data.*****NCCE Data logging** Recognising how and why data is collected over time, before using data loggers to carry out an investigation. | ***Information Technology: information and data Can analyse information and data*****NCCE Introduction to spreadsheets** Answering questions by using spreadsheets to organise and calculate data. |
| **Creating Media** | ***Information Technology: create digital content Use technology to manipulate digital content.******Typing skills*** ***Keyboard skills*****NCCE Making music** Using a computer as a tool to explorerhythms and melodies, before creating a musical composition. | ***Information Technology: create digital content Create content to accomplish a goal.*****NCCE Photo editing** Manipulating digital images and reflecting on the impact of changes and whether the required purpose is fulfilled. | ***Information Technology: create digital content Combine a variety of software to accomplish given goals on a range of digital devices.*****NCCE 3D modelling** Planning, developing, and evaluating 3D computer models of physical objects. |
| **Programming B** | ***Computer Science: write and debug programs Can debug simple programs.*****NCCE Programming quizzes** Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz. | ***Computer Science: algorithms and logical reasoning Use logical reasoning to correct errors in programs.*****NCCE Repetition in games** Using a block-based programming language to explore count controlled and infinite loops when creating a game. | ***Computer Science: algorithms and logical reasoning Can solve problems in writing programs by decomposing them into smaller parts.*****NCCE Sensing** Designing and coding a project that captures inputs from a physical device. |