

Units from Teach Computing arranged for mixed year groups Y1-Y6: <https://teachcomputing.org/curriculum>

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|   |   | Computing Systems and Networks  | Creating Media  | Programming  | Data and Information  | Programming  | Creating Media  |
| Year 1/2  | Cycle B  | Year 1 Unit – Technology Around Us (Lessons 1 & 2); Year 2 Unit – IT Around Us (Lessons 1 – 4) (learn about technology and information technology; identify the parts of a computer)    | Year 1 Unit – Digital Painting (create images using painting and drawing software on a computer, eg Mondrian-style art)    | Year 1 Unit – Moving a Robot (learn sequence in programming by programming a floor robot)   | Year 1 Unit – Grouping Data (learn how objects can be described and categorised in ways which a computer can then sort and process)  | Year 2 Unit – Robot Algorithms (create algorithms to achieve a specific goal, implement them and debug code)  | Year 2 Unit – Digital Music (creating music using software on a computer)  |
| Cycle A  | Year 1 Unit – Technology Around Us (Lessons 3 – 6 ); Year 2 Unit – IT Around Us (Lessons 5 & 6) (learn about how to use a computer mouse and keyboard; learn how to use technology safely and responsibly)  | Year 1 Unit – Digital Writing (use a word processer-style tool to create, edit and change the look of writing on a computer)    | Year 1 Unit – Programming Animations (learn sequencing in programming by using Scratch Jr to animate a sprite)   | Year 2 Unit – Pictograms (collect, organise and present data using tally charts and pictograms)  | Year 2 Unit – Programming Quizzes (develop algorithms to implement quizzes in Scratch Jr, debug and improve code)  | Year 2 Unit – Digital Photography (develop photography skills by considering what makes a good photograph and making simple changes to taken photographs)  |
|   |   | E-safety taught at the beginning of each half term using the Twinkl Units: Y1 Units with cycle B and Y2 Units with Cycle A |   |   |   |   |   |

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|    | Computing Systems and Networks  | Creating Media  | Programming  | Data and Information  | Programming  | Creating Media  |
| Year 3/4  | Cycle B  | Year 3 Unit – Connecting Computers (Lessons 4 – 6); Year 4 Unit – The Internet (Lessons 1 – 3) (learn about how computers talk to each other over a network and then how the internet is a network of networks which allows computer across the world to talk to each other)  | Year 3 Unit – Desktop Publishing (use a desktop publishing program to create media considering layout and design)    | Year 3 Unit – Sequencing Sounds (introduction to Scratch and learn how to change costumes and backgrounds culminating in making a Scratch musical instrument)   | Year 3 Unit – Branching Databases (identify attributes and use these to create branching database)  |  Year 4 Unit – Repetition in Games (use repetition in a Scratch game controlling a sprite to make it move)  | Year 4 Unit – Audio Production (record and edit sounds creating a podcast or other digital audio product)  |
| Cycle A  | Year 3 Unit – Connecting Computers (Lessons 1 – 3); Year 4 Unit – The Internet (Lessons 4 – 6) (learn about computers as input-process-output devices and explore the World Wide Web, its resources and its risks)  | Year 3 Unit – Stop-Frame Animation (create a short film animation using a computer)    | Year 3 Unit – Events and Actions (use Scratch and the movement and pen blocks to draw shapes and move around a maze)  | Year 4 Unit – Data Logging (use sensors to collect and analyse data using a data logger)  |  Year 4 Unit – Repetition in Shapes (introduce repetition to draw shapes in Logo)  | Year 4 Unit – Photo Editing (use software to change an image using a variety of tools)   |
|   |   | E-safety taught at the beginning of each half term using the Twinkl Units: Y3 Units with cycle B and Y4 Units with Cycle A |   |   |   |   |   |
|   |   | Computing Systems and Networks  | Creating Media  | Programming  | Data and Information  | Programming  | Creating Media  |
| Year 5/6  | Cycle B  | Year 5 Unit – Systems and Searching (understand more about computer systems and devices, learn about searching the web effectively and safely)  | Year 5 Unit – Introduction to Vector Graphics (learn how to create a vector drawing and use the associated tools)    | Year 5 Unit – Selection in Quizzes (learn how to use selection in Scratch to make a quiz)   | Year 5 Unit – Flat-file Databases (build and search a flat-file database)  |  Year 6 Unit – Sensing Movement (use a Micro:bit and knowledge of selection and variables to create a step-counter)  | Year 6 Unit – 3D Modelling (use a range of 3D modelling tools culminating in designing a 3D model)  |
| Cycle A  | Year 6 Unit – Communication and Collaboration (understand that data travels in packets over the internet, understand different methods of communication and collaboration over the internet)  | Year 5 Unit – Video Production (film and edit a video using different filming and editing techniques)    | Year 5 Unit – Selection in Physical Computing (learn how to use selection with a Crumble device)   | Year 6 Unit – Introduction to Spreadsheets (learn how to use spreadsheets including simple formulae and ways to present information)  |  Year 6 Unit – Variables in Games (learn about variables and how these can be used in Scratch to program a games which keeps score, or counts lives.)  | Year 6 Unit – Web Page Creation (understand web pages and design a page layout adding content and evaluating the finished product)  |
|   |   | E-safety taught at the beginning of each half term using the Twinkl Units: Y5 Units with cycle B and Y6 Units with Cycle A  |   |   |   |   |   |

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| COMPUTING LONG TERM PLAN – EYFS |
| Cycle | Autumn Term | Spring Term | Summer Term |
| Nursery and Reception | A | Online SafetySelf-image and identity Online relationshipsComputer Science – Coding & Computational Thinking Barefoot Computing-[Awesome Autumn](https://www.barefootcomputing.org/earlyyears)[Busy Bodies](https://www.barefootcomputing.org/early-years-with-all-resources) | Online Safety Online bullyingComputer Science – Coding & Computational Thinking Barefoot Computing-[Springtime](https://www.barefootcomputing.org/early-years-with-all-resources) | Online Safety Health, Well-being and lifestyleComputer Science – Coding & Computational Thinking Barefoot Computing-[Summer Fun](https://www.barefootcomputing.org/early-years-with-all-resources) |
| B | Online Safety Online reputationComputer Science – Coding & Computational Thinking Barefoot Computing-[Winter Warmers](https://www.barefootcomputing.org/earlyyears) [People Who Help Us](https://www.barefootcomputing.org/early-years-with-all-resources) | Online Safety Privacy and security Copyright and ownershipComputer Science – Coding & Computational Thinking Barefoot Computing –[Super Space](https://www.barefootcomputing.org/early-years-with-all-resources) | Online Safety Managing online informationComputer Science – Coding & Computational Thinking Barefoot Computing-[Boats Ahoy](https://www.barefootcomputing.org/early-years-with-all-resources) |