

Year	Using Technology Safely	Data Modelling	Computer Networks
7	1 Passwords and logging on 2 Getting Started with Horizons 3 Respectful Online Communication 4 What is Cyberbullying 5 Presenting to an Audience 1 6 Presenting to an Audience 2	1. What is a spreadsheet? 2. Quick Calculations 3. Collecting Data 4. Working with Data 5. Working with Data 2 6. Assessment	1. Introduction to Networks 2. Network Hardware 3. Wired and Wireless Networks 4. The Internet 5. The Internet of Things 6. The World Wide Web

Year	Programming from Scratch	Binary and Boolean Logic	Computational thinking and algorithms
8	1. Selection 2 2. Iteration 2 3. Subroutines 4. Sensing and Broadcasting 5. Building a game 6. Assessment	1. Thinking in 1s and 0s 2. Thinking with 8 bits 3. Converting from denary 4. Logic gates 5. Truth Tables 6. Assessment	1. Algorithms 2. Computational thinking 3. Representing Algorithms 4. Searching and sorting 1 5. Searching and sorting 2 6. Assessment

Year	Programming from Scratch	Stenography, Binary and Security	Beginners Robotics
9	1. Selection 2 2. Iteration 2 3. Subroutines 4. Sensing and Broadcasting 5. Building a game 6. Assessment	1. Images and Encryption 2. Binary 3. Big Binary 4. Binary to protected data 5. Cyber Security 6. Assessment	1. Algorithms 1 2. Algorithms 2 3. Micro:bits 4. Variables 5. Selection 6. Designing a Pet

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
10	Practical 1. Introduction to Computer Science 2. Translators 3. Sequence 1 4. Sequence 2 5. Variables 6. Input 7. Casting 8. Debugging 9. Flowcharts 1 10. Flowcharts 2 11. Solving complex problems 12. Assessment Theory 1. Computer Systems 2. The CPU 3. CPU Registers 4. The FDE Cycle 5. Main Memory 6. Secondary Storage	Practical 1. Randomisation 2. Arithmetic Expressions 3. Selection 4. Selection Challenge 5. Logical Expressions 6. Nested Selection 7. While Loops 8. Trace Tables 9. For Loops 10. Data Validation 11. Data Validation 2 12. Assessment Theory 1. Optical and Magnetic Storage 2. Selecting a storage device 3. Computer specifications 4. Boolean Logic 5. Logic Problems 6. Logic Problems 2	Practical 1. Pseudocode 2. Subroutines 1 3. Subroutines 2 4. Functions 5. Functions 2 6. Scope 7. Constants 8. Structured Programming 1 9. Structured Programming 2 10. Creating a larger program 1 11. Creating a larger program 2 12. Assessment Theory 1. Computational thinking 2. Representing Algorithms 3. Tracing Algorithms 1 4. Tracing Algorithms 2 5. Reading algorithms 6. Building algorithms	Practical 1. String Handling 1 2. String handling 2 3. String Handling 3 4. ASCII Conversions 5. Programming challenge (Strings) 6. Arrays and Lists 7. List Methods 1 8. List Methods 2 9. 2D Arrays and Lists 10. Programming Challenge (Lists) 11. Programming Challenge (Lists) 2 12. Assessment Theory 1. Cybersecurity 2. Non-Automated Cybercrime 3. Automated Cybercrime 4. Software Design as a Defence 5. Network Design as a Defence 6. Where is the Danger	Practical 1. Reading text files 2. Writing to text files 3. Working with CSV files 4. Write to CSV files 5. Good programming practices 6. Good programming practices 2 7. Project planning Theory 1. What is representation 2. Number bases (binary to denary) 3. Number bases (denary to binary) 4. Binary addition 5. Binary subtraction 6. Binary shift 7. Signed binary integers 8. Hexadecimal 1 9. Hexadecimal 2 10. Representing Text 11. Assessment	Practical 1. Project design 1 2. Project design 2 3. Project building 1 4. Project Building 2 5. Project testing 6. Project Evaluation Theory 1. Unicode and file size calculation 2. Representing bitmap images 3. Bitmap file size calculation 4. Representing sound 5. Sound file size calculation 6. Measurements of storage 7. Compression 8. Run length encoding 9. Huffman Coding 10. Operating Systems 11. System Software 12. Assessment