

“[Enquiry question]”

[Year 8 Unit Hardware & Computer Systems]

What previous learning am I building on?	What am I learning that is new?
- Year 7 understanding of basic hardware components and their functions - Familiarity with input/output devices - Basic problem-solving and selection of hardware for specific uses	By the end of this unit, I will: - Understand how different computer components interact to perform tasks. - Be able to identify, compare and evaluate internal and external hardware. - Know how to choose appropriate hardware for different user requirements
Learning Journey – lesson title and main activities	
1 Input Devices - Explore a range of standard and specialist input devices - Discuss use cases for each	
2 Internal Components - Learn about CPU, GPU, RAM, motherboard, power supply, storage devices. - Understand how they work together	
3 Memory - Explore RAM, ROM, cache memory, virtual memory - Understand how memory affects performance	
4 Choosing Hardware - Consider user needs, budget and performance - Learn to compare specifications	
5 Performance Factors - Investigate how hardware components impact speed and reliability - Discuss bottlenecks in performance	
6 Building a System (Theory/Virtual) - Learn about compatibility and power requirements	
7 Assessment & Reflection - Consolidate all learning from the unit.	
How will I be assessed at the end of this unit?	
- Completion of a hardware selection and justification task - Participation in class discussions and peer reviews	

How will my literacy skills be developed?	What homework will I be set?	How can I learn more/stretch myself?	Where can I go for more help?
Using accurate technical vocabulary related to hardware.	Satchel One Quizzes: Retrieval questions.	Watch videos explaining how each component works in detail.	Computer Science teacher, BBC Bitesize, TechRadar, HowStuffWorks, YouTube tutorials.

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[Year 8 Unit HTML/CSS]

What previous learning am I building on?	What am I learning that is new?
	By the end of this unit, I will:
Learning Journey – lesson title and main activities	
1 Your first web page - Introduction to HTML structure - Use of headings, paragraphs and lists - Build your first HTML page using basic elements	
2 Embedding images and links - Add images and links - Understand attributes - Build a page with images and a list of useful links	
3 Custom Style Sheets - Introduction to CSS syntax - Learn to style text - Apply inline and internal styles to improve web page	
4 Linking HTML and CSS - Use external CSS files for consistent styling across pages - Organise files into folders - Link a CSS file to a webpage and format layout and colour	
5 Putting it into practice - Plan and design a simple multi-page website - Use headers, footers and navigation menus - Start building your final project site	
6 A working website - Complete the site with all core pages linked - Ensure consistency and accessibility - Test and peer review each other's websites	
7 Reflection & Polish - Debug and refine HTML and CSS - Add final features - Submit and present finished website.	
How will I be assessed at the end of this unit?	
- Completion of a functional multi-page website with clear layout and design - Use of HTML tags and CSS styling to meet a given brief - Final peer-reviewed project and teacher feedback - Retrieval quizzes and understanding of syntax and structure	

How will my literacy skills be developed?	What homework will I be set?	How can I learn more/stretch myself?	Where can I go for more help?
Writing descriptive content and alt text for accessibility. Using correct tag names and syntax	Satchel One Quizzes: Retrieval questions	Build a personal webpage at home using repl.it or GitHub Pages. Try challenges on w3schools.	Computer Science teacher, w3schools, FreeCodeCamp, YouTube tutorials and classroom resources.

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[Year 8 Unit Python Programming]

What previous learning am I building on?	What am I learning that is new?
- Year 7 understanding of basic programming concepts. - Experience with block-based programming. - Logical thinking and problem-solving	By the end of this unit, I will: - Understand how to write structured programs using programs - Know how to use loops, variables, input/output and colour codes effectively - Be able to design, write and test a complete python program for a given task.
Learning Journey – lesson title and main activities	
1 Introduction to Python - What is python? Why is it used? - Writing simple programs	
2 Input and Outputs - Taking user input in a program - Displaying results with variables	
3 Loops and Colours - Learn about loops - Using colour output libraries	
4 Programming Plan - Plan a complete program - Identify inputs, processes and outputs	
5 Complete Program - Begin writing the final program - Test and debug code	
6 Peer Review and Improvements - Test each other's programs - Give constructive feedback and improve the code	
7 Reflection and Showcase - Present your completed program - Reflect on what was learned and what could be improved	
How will I be assessed at the end of this unit?	

- Completion of final python program based on planning task
- Demonstration of key skills: input/output, variables loops and structure
- Code comments, testing evidence and reflection
- Peer assessment and teacher feedback

How will my literacy skills be developed?	What homework will I be set?	How can I learn more/stretch myself?	Where can I go for more help?
- Writing clear comments in code.	- Satchelone Quizzes: Retrieval	- Try CodeCombat or HackinScience for challenges	- Computer Science Teacher, BBC Bitesie or W3Schools

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[Year 8 Unit Python Programming]

What previous learning am I building on?	What am I learning that is new?
- Knowledge of basic programming from year 8 - Understanding of sequences, variables and inputs/outputs - Logical thinking and structured problem solving	By the end of this unit, I will: - Understand and apply data types, arrays, and comparison operators - Be able to design and develop a simple game using Python - Improve skills in writing, testing and debugging code
Learning Journey – lesson title and main activities	
1 Introduction - Recap of Python syntax - Print statements, comments and user input	
2 Data Types - Learn the different data types - Use conversion functions	
3 Comparison operators - Understand the different comparison operators - Combine Operators with Selection statements	
4 Lists and Arrays - Introduction to lists - Accessing, modifying and looping through lists	
5 Game Development - Start designing a text-based game - Focus on storyline, input handling, logic and replay options	
6 Testing & Debugging - Learn common errors - Use output functions for debugging	
7 Showcase and Reflection - Present final project to the class - Reflect on code quality and creativity	
How will I be assessed at the end of this unit?	
- Completion of a final interactive game or program using lists, logic and input - Code includes comments - Peer review and teacher feedback - Retrieval quizzes	

How will my literacy skills be developed?	What homework will I be set?	How can I learn more/stretch myself?	Where can I go for more help?
- Writing clear code comments, using programming terms accurately.	- Retrieval questions via satchel One.	- Try python challenges on Replit, CodeCombat or HackerRank	- Computer Science teacher, BBC Bitesize, W3Schools and FreeCodeCamp

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[Year 8 Unit Logic Gates & Flow Charts]

What previous learning am I building on?	What am I learning that is new?
- Basic understanding of binary - Awareness of inputs, outputs and processes in computer systems - Problem-solving using algorithms and sequences in earlier programming work	By the end of this unit, I will: - Understand and apply logic gates and truth tables - Create and interpret flow charts to model decision making - Be able to design simple digital logic systems and algorithmic flow diagrams
Learning Journey – lesson title and main activities	
1 Introduction to Logic Gates - Learn about the different logic gates - Symbols and real-life uses in computing	
2 Truth Tables - How to construct truth tables for logic gates - Understand outputs from combinations of binary inputs	
3 Combining Gates - Explore combinations of gates - Use diagrams to predict output	
4 Introduction to Flow Charts - Learn standard flowchart symbols - How flowcharts represent logical steps	
5 Building Flowcharts for decision making - Create flowcharts that use selection - Test algorithms using example	
6 Assessment & Reflection - Paper Assessment	
7	
How will I be assessed at the end of this unit?	
- Completion of a flowchart and logic gate circuit to meet a design brief - Paper Assessment on logic gates, truth tables and flow charts.	

- Peer review and teacher feedback on clarity and accuracy			
How will my literacy skills be developed?	What homework will I be set?	How can I learn more/stretch myself?	Where can I go for more help?
- Using technical vocabulary and explaining logic systems clearly in writing	- Retrieval quizzes: Satchel One.	- Try online simulators like logic.ly	- Computer Science teacher, BBC Bitesize, Teach-ICT.

“[Enquiry question]”

[Year 8 Unit Searching & Sorting Algorithms]

What previous learning am I building on?		What am I learning that is new?	
- Understanding of basic programming concepts - Knowledge of data types and data structures - Use of logical thinking and step-by-step problem solving		By the end of this unit, I will: - Understand and explain searching algorithms - Learn how sorting algorithms work - Be able to evaluate and compare algorithm efficiency	
Learning Journey – lesson title and main activities			
1 Introduction - What is an algorithm? - Understand the purpose and importance of searching/sorting			
2 Sorting Algorithms - Understand how the different Sorting algorithms work			
3 Searching Algorithms - Understand how the different Searching algorithms work			
4 Comparing Efficiency - Which algorithm is faster and why?			
5 Assessment & Reflection - Paper Assessment			
6			
7			
How will I be assessed at the end of this unit?			
- Participation in class activities and simulations - End-of-unit assessment, testing knowledge of algorithm types and their purpose - Peer and teacher feedback on understanding and communication			
How will my literacy skills be developed?	What homework will I be set?	How can I learn more/stretch myself?	Where can I go for more help?