

Year 7/8 IT Curriculum Sequence

Subject Intent: Our aim is to inspire and develop students with digital, entrepreneurial and creative skills that will give them the opportunities to succeed with confidence and find fulfilment in the fast-paced world within which they live.

	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Big idea/Theme	Introduction to the IT network at NWA	Develop an awareness of different hazards (physical and virtual environment)	Spreadsheets – layout and formatting	Spreadsheets – Basic formula	Programming – understanding variables	Programming – interaction between sprites
Big Idea/Theme	How to use IT appropriately		Spreadsheets – Using arithmetic operators in a spreadsheet	Spreadsheets – creating charts	Programming – understanding if and else statements	Programming – introducing counters (e.g. lives and time)
Big idea/Theme				Spreadsheets – Interpreting charts to inform decision making.	Programming – understanding while loops	Programming – debugging.
Knowledge that needs to stick	Conventions for naming files and folders. Accessing documents, email, Teams and GO online. Sending emails with attachments. Understanding the IT room rules.	Health and safety in a physical IT environment (e.g. trip hazards, seating position, light source etc.) The importance of IT security (e.g. strong passwords) Hazards and acceptable behaviour in the virtual world.	Columns/ Rows (add, delete, edit, widths, heights) Formatting (Backgrounds, fonts, borders) Arithmetic operators (+,-,/,x)	Basic formula (sum, average, max, min) Charts (time series, cross section data, formatting, labels and titles) Interpreting charts (using %, justifying decision making)	Understand variable names. Using IF statements Using while loops	Introducing complex variables (scores, lives timers) Problem solving

Demonstration of Knowledge (Assessment)	Evidence of sending attachments of work to the teacher including a print screen showing folders created.	Submission of an information poster based on a chosen element of IT safety	Spreadsheet to be created for a business scenario – submitted at the end of the project along with short written report	Spreadsheet to be created for a business scenario – submitted at the end of the project along with short written report	Game to be submitted at the end of the project	Game to be submitted at the end of the project
Links to key stage 2/ prior knowledge needed	Assumed no prior knowledge	Assumed no prior knowledge	Assumed no prior knowledge	Assumed no prior knowledge	Students prior knowledge of a blocky programming language.	Students prior knowledge of a blocky programming language.
Skill set development	Understanding of the school network and applications used routinely in school/ home	Understanding of the risks associated with IT and how to reduce/ remove them.	Basic formula, functions and formatting in spreadsheets.	Basic formula and charts in spreadsheet (including interpretation)	Basic understanding of programming techniques	More advanced programming techniques and debugging.
Key Vocabulary (Tier 2/ Tier 3)	Attachment Email Network	RSI Eyestrain Social media Cyber bullying Predatory adult	Cell, Row, Column, Formatting, Arithmetic operator	Formula, Sum, Cross sectional, Time series, Data analysis	Variable, Sprite, IF statement, While loop	Debugging
Reading and Oracy	Acceptable use policy	Phishing emails Social media profiles	Business scenario		Game plots	
Numeracy	N/A	N/A	Tally charts Arithmetic operators Sum Average Max Min	Creating and interpreting charts Percentages	Problem solving – effect of changes on variables	Problem solving – effect of changes on variables

Opportunities						
Careers		Internet nanny Ethical Hacking	Marketing officer	Data analyst	Game designer Graphic designer Game tester Programmer	Game designer Graphic designer Game tester Programmer
Relationship and Sex Education and Health Education	IT H&S	Screen addiction Predatory adults Cyber bullying Online relationships			PEGI Ratings	

Year 9 IT Curriculum Sequence

Subject Intent: Our aim is to inspire and develop students with digital, entrepreneurial and creative skills that will give them the opportunities to succeed with confidence and find fulfilment in the fast-paced world within which they live.

	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Big idea/Theme	Compare and contrast NWA students IT use to the national average	Photoshop skills builder activities.	Web design – Analyse an existing website (strengths and weaknesses)	Creating interactive elements (rollovers)	Animation – Creating storyboards.	Game design- Using IF statements and while loops.
Big Idea/Theme	Survey and data analysis	Interpreting a client brief.	Generating ideas for a website (pre-production documents)	Embedding external content (maps/ videos)	Skills development – pivot stick figure animator.	Introducing variables.
Big idea/Theme	Secondary research and comparison	Producing a graphical product to meet a brief.	Website branding (House style, logos and banners)		Developing an animation in line with a storyboard.	Testing and debugging
Knowledge that needs to stick	Columns/ Rows (add, delete, edit, widths, heights) Formatting (Backgrounds, fonts, borders) Arithmetic operators (+,-,/,x) Basic formula (sum, average, max, min) Charts (time series, cross section data, formatting, labels and titles) Interpreting charts (using %, justifying decision making)	Importing images into Photoshop, Managing layers, Use of filters, Use of brightness and contrast, cropping, layer masks, spot heal tool, clone stamp tool, adding text to an image, merging layers.	Elements used on webpages, Creating visualisation diagrams, meaning of colours in graphic design, logo design, web banner skills.	Creating rollovers in Fireworks, embedding external content, Creating web forms, Importing assets into Dreamweaver.	Understanding of persistence of vision, Development of animation through time, Storyboarding, Using pivot stick figure to animate.	Understand variable names. Using IF statements Using while loops Introducing complex variables (scores, lives timers) Problem solving

Demonstration of Knowledge (Assessment)	Spreadsheet and Ppt. presentation to be submitted (with speaker notes)	Completed graphic that meets the clients requirements.	Completed website for Hamerton Zoo	Completed website for Hamerton Zoo	Completed animation and storyboard.	Game to be submitted at the end of the project
Links to key stage 2/ prior knowledge needed	Students have a basic understanding of layout and arithmetic operators from Year 7.	Assumed no prior knowledge	Assumed no prior knowledge	Assumed no prior knowledge	Assumed no prior knowledge	Students prior knowledge of a blocky programming language.
Skill set development						
Key Vocabulary (Tier 2/ Tier 3)	Cell, Row, Column, Formatting, Arithmetic operator Formula, Sum, Cross sectional, Time series, Data analysis	Canvas Layer Transform Aspect ratio Filters Masks				Variable, Sprite, IF statement, While loop Debugging
Reading and Oracy	Articles re IT use: National averages/ recommendations Issues with misuse.					Game plots
Numeracy	Tally charts Arithmetic operators	Image resolution and size (dpi)				Problem solving – effect of changes on variables

	Sum Average Max Min Creating and interpreting charts Percentages					
Opportunities						
Careers	Data analyst					
SMSC including British Values, Culture and Diversity	Choose an item. Choose an item. Choose an item. Choose an item.	Choose an item. Choose an item. Choose an item. Choose an item.	Choose an item. Choose an item. Choose an item. Choose an item.	Choose an item. Choose an item. Choose an item. Choose an item.	Choose an item. Choose an item. Choose an item. Choose an item.	Choose an item. Choose an item. Choose an item. Choose an item.
Relationship and Sex Education and Health Education						

Key Documents:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/908013/Relationships Education Relationships and Sex Education RSE and Health Education.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/908013/Relationships_Education_Relationships_and_Sex_Education_RSE_and_Health_Education.pdf)

<https://www.thecdi.net/write/CDI-Framework-Jan2020-web.pdf>