

Willow Park School - Long Term Plan - Loxley – Computing – Loxley (KS3)



Cycle / Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Below insert either the year group or the cycle	<u>Digital Literacy</u>	<u>Information Technology</u>	<u>Computing</u>	<u>Digital Literacy</u>	<u>Information Technology</u>	<u>Computing</u>
1 2023 - 2024	Cyber Security Unit <ul style="list-style-type: none"> Profiling Data Protection Act Computer Misuse Act Hacking Malware Protection methods such as firewalls, anti-malware, and password authentication 	Fortnite Spreadsheet Unit <ul style="list-style-type: none"> Use of good Research What is a Spreadsheet used for? Finding accurate sources (for research) Populate tables using excel Using simple addition Formula The SUM function Conditional Formatting Password Protection Data Validation 	Pac-Man Programming Unit <ul style="list-style-type: none"> What is coding Use of scripting blocks Creating sprites Creating a stage Testing code Fixing any bugs Understanding code Create a fully working game Evaluation 	Animations <ul style="list-style-type: none"> What is an animation Types of Animation Storyboards Flipbook Keyframes Onion Skinning Frame Rate Cloning Fitness for Purpose 	Developing for the Web Unit <ul style="list-style-type: none"> Searching Navigation Bars Hyperlinks Rollovers Effective Website Design Threats HTML and CSS 	Introduction to Python Programming Unit <ul style="list-style-type: none"> Programming languages Algorithms Storing and executing instructions Design, Python Program Use Python Evaluate
	2 2024 - 2025	Online Safety Unit <ul style="list-style-type: none"> Online reputation Right to privacy Data protection Fake news Illegal content Right to access Big data 	Superhero Database <ul style="list-style-type: none"> Primary Keys Fields Records Queries Forms Tables Databases in real life 	Robotics Unit <ul style="list-style-type: none"> Algorithms Sequences Selection Repetition (loops) Flowcharts Pathways and routes Debugging Problem solving Team working 	Media Unit <ul style="list-style-type: none"> Getting the message across Creating a brand Understanding slogans Different media types Video creation – adding content Snipping and editing Fitness for purpose 	What's inside a Computer <ul style="list-style-type: none"> Components of a Computer RAM & ROM Input Devices Output Devices Wired vs Wireless Networks & Protocols Internet



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<p style="text-align: center; font-size: 2em; font-weight: bold;">3</p> <p style="text-align: center;">2025 - 2026</p>	IT and the World of Work Unit	Graphics Unit	Binary Representation Unit	Social Media Unit	Micro:bits Unit	Advanced Python Programming Unit
	<ul style="list-style-type: none"> • The modern world or work • Accessibility • History of ICT • Future of ICT • AI • Flexible Working 	<ul style="list-style-type: none"> • Investigating Graphics • Bitmap vs Vector • Logo Design • Logo Creation • Fit for Purpose – Evaluation 	<ul style="list-style-type: none"> • Cryptology • Binary Numbers • Adding Binary • Hexadecimal • Character Sets • Images/Pixels 	<ul style="list-style-type: none"> • Social Media good or bad • Dangers • Trolling • Revenge Posts • Laws and Legislations • How to stay safe 	<ul style="list-style-type: none"> • Fundamental concepts and principles • Algorithms • Storing and Executing instructions • Real World problems • Programming and using Micro:bits. 	<ul style="list-style-type: none"> • Introduction to 'Command Line' how we used to operate a computer • Recap of Python Code • Nested 'If Statements' • Lists • Strings • Random Code • Loops • Testing and De-Bugging