LAWN MANOR ACADEMY

Computer Science KS3

INDEPENDENCE

KNOWLEDGE / LITERACY / NUMERACY / ORACY / AGENCY

	Year 7	Year 8	Year 9
CONTENT / TOPICS / CONCEPTS	Welcome to Computing Typing Skills (using Typing.com) PowerPoint Presentations (designing slides, presenting information) Emerging Technologies and Internet Research (researching and communicating on new technologies) Application of Emerging Tech (integrating research into presentations) Presentation Skills (using technology and webcams) Responsible Use of Technology (internet safety and digital conduct) Programming Foundations with BBC Microbit (coding concepts and application) Data Logging and Analysis (using Dyson Data Loggers)	Welcome Back & Advanced Typing Word Processing Skills (using shortcuts, saving, formatting) Formatting Documents (pictures, graphs in word processors) Introduction to Coding (Bebras Coding Challenge) Cyber Safety (advanced internet and digital safety concepts) Working with Spreadsheets (data entry, formulas, simple graphs) Artificial Intelligence: Comic Book Project (exploring AI influences in creative media) Block-Based Programming with Edublocks (game logic: Rock, Paper, Scissors) Introduction to HTML (web foundation skills) Website Prototyping (using Rocket Cake)	Welcome and Careers in Computing AI and Environmental Posters Advanced Computational Thinking (Bebras Code Challenge) Accessibility in Technology (design for all, Apps for Good) AI for Social Good (exploring ethical and practical impacts) Ideation and App Design (creative thinking, toolkit sessions) Industry Engagement (presenting ideas to professionals) App Development (building and prototyping apps with focus on UX/UI) Project Showcase (team presentations, feedback) Digital Skills for GCSE (using Office 365 for academic success) Media Literacy (image manipulation, effects in advertising using Photoshop)
VOCABULARY	Algorithm, Sequence, Input, Output, Data, Computer, CPU (Central Processing Unit), Memory, RAM (Random Access Memory), Storage, Password, Username, Log in, Presentation, Slide, Format, Edit, Typing, Internet, Research, Technology, Safety, Cyberbullying, Online, Digital, Microbit, Code, Variable, Data logging, Analysis,.	Word processing, Formatting, Shortcut, Document, Spreadsheet Cell, Row, Column, Formula, Graph, Data entry, Bebras (Coding Challenge), Computational thinking, Logic, Block-based Programming, Edublocks, Algorithmic, Condition, Loop, Debug, HTML, Website, Prototype, AI (Artificial Intelligence), , Media, Copyright, Presentation skills, Save, File, Cyber safety,	Python, Sequence, Selection, Iteration, Variable, Input/output, Data type, String, Integer, Float, Boolean, Condition, Syntax error, Debug, Flowchart, Pseudocode, App, Prototype, User experience (UX), Accessibility, AI (Artificial Intelligence), Machine learning, Societal impact, Ethics, Evaluation, Networking, Storage, Image editing, Digital media, Media literacy.
SKILLS	Digital literacy, Typing and basic productivity, Presentation skills, Online research, Internet safety, Introductory programming and data handling, Project work and teamwork: Working individually and in groups to complete and share digital projects.	Advanced typing and digital productivity, Spreadsheets and basic data analysis. Computational thinking. Block-based programming and web skills. Cyber security. Artificial intelligence awareness. Creativity and digital presentation.	Digital skills for future study and work: Using Office 365 for managing, saving, and submitting assignments. Career and industry awareness. Programming and computational thinking. Artificial intelligence and ethics. App development, prototyping, and UX/UI. Collaboration and presentation. Digital media and media literacy.
ASSESSMENT	Baseline assessment at the start of the year to determine knowledge of digital literacy, including logging in, password management, and using basic computer applications Practical presentations. Typing assessments to measure speed and accuracy at multiple points during the year. Online safety quiz. Research and presentation task on emerging technologies, assessed via content and quality of visual communication.	Re-baseline test on digital skills, including advanced typing, word processing, and safe use of school IT systems. Spreadsheet assessment task that evaluates data entry accuracy, use of formulas, graph/chart creation, and layout. Bebras Coding Challenge: National challenge assessing computational thinking, logic, and problem-solving through exam-style questions. Cyber safety knowledge checks via quizzes or scenario-based activities.	Typing and digital skills check-in on Office 365 and efficient document management for GCSE preparation. Participation in Bebras Code Challenge (Intermediate): Assesses computational thinking at a higher level than previous years. Team presentations and industry engagement. App development projects: Graded on prototype completeness, adherence to user experience design, reflection on accessibility, and teamwork. Practical assessments in media literacy: Projects using Photoshop or similar

ATTITUDE

Understanding others, behaviour and attitudes, SMSC, PHSE

Throughout the KS3 Computer Science course, students build positive attitudes by engaging in collaborative projects, respecting diverse perspectives, and practicing responsible digital citizenship. The curriculum promotes understanding of others through teamwork, peer feedback, and inclusive activities that celebrate individual strengths. Lessons on internet safety, ethical technology use, and online behaviour raise awareness of social, moral, spiritual, and cultural (SMSC) issues, while PHSE elements are addressed as students consider their digital footprint, personal rights, and responsibilities in an increasingly connected world. Pupils are encouraged to reflect on their own behaviour, support others, and contribute thoughtfully to a positive and respectful

RESILIENCE

Character, personal Development, wellbeing and CIAG

KS3 Computer Science fosters resilience by challenging students with new technologies, coding projects, and creative problem-solving tasks that develop perseverance and adaptability. Experiences such as presenting work, designing apps for social good, and navigating feedback from peers or industry volunteers cultivate confidence and a growth mindset. The curriculum supports personal wellbeing by teaching students how to manage setbacks, celebrate achievements, and seek help when needed. Through careers education, information, advice, and guidance (CIAG), students gain awareness of diverse pathways in technology, motivating them to set goals and build the personal character required for lifelong learning and success in a digital society.