

Magdalen Gates Primary School

Computing

2022/2023



Computing systems and networks	Programming	Data and information	Creating media
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Colours refer to the four strands of the NCCE curriculum. Units Y1-6 from the [NCCE Teach Computing](#) curriculum framework

*Half termly Online Safety themes link to [Education for a Connected World Framework](#) using [Project Evolve](#) resources

	Autumn 1	Autumn 2 Anti Bullying Week 14-18th Nov	Spring 1 Safer Internet Day 7th Feb	Spring 2	Summer 1 Mental health awareness week 10th-16th May	Summer 2
Whole School Themes	Community	Change and progress	Exploration and discovery	Technological advancement	Climate and sustainability	Conflict and Power
Online Safety Themes *	Self-image and identity	Online bullying	Online reputations and relationships	Managing online information, privacy and security	Health Wellbeing and Lifestyle	Copyright and ownership
Nursery	Role playing with digital devises. Where have I seen technology?	Operating and playing with electronic devices and toys. What does this button do?	Making something happen on a digital device. Can I make it work?	Listening to sound, music and stories. How can technology entertain us?	Recognising a range of digital devices. What's that device?	Exploring robotic toys. Can I make it move?
Reception	Digital technology and its uses. Where is there technology?	Turning on digital devices. Making a robot move. How can I make something happen on a device?	Using a mouse/tracker pad. Creating a picture. How do make pictures on a device?	Understanding that information on a computer can be saved and reopened. Where can I keep things safe on a computer?	Knowing that we can find out things from digital devices and online. How can technology help me to find answers?	Recognising the first letter of their name, and experimenting with finding letters they know. How do I write my name on a device?
Year 1	Technology around us How can technology help us?	Digital painting Can Art be made on a computer?	Moving a robot How do robots move?	Grouping Data How can we sort information?	Digital writing Is it better to write a story in pencil on a keyboard?	Programming animations What is an algorithm?
Year 2	Information technology around us How is IT being used for good in our lives?	Digital photography Is this photo real?	Robot algorithms How do I know what my robot will do?	Pictograms What is an attribute?	Making music Can music make us feel differently?	Programming quizzes What is debugging?

Year 3	Connecting computers What is our school network?	Stop frame animation Can a picture move?	Sequencing sounds Can an instrument be programmed?	Branching databases How can data be used to identify new things?	Desktop publishing How do text and images communicate messages?	Events and actions in programs How can you escape the maze?
Year 4	The internet Is everything on the internet true?	Audio production Who owns a song?	Repetition in shapes Can programs write words?	Data logging Why is data collected over time?	Photo editing Should we change and edit images?	Repetition in games How can repetition help game designers?
Year 5	Systems and searching How can systems help us online?	Video production What is a video?	Selection in physical computing How do traffic lights work?	Flat file databases How can databases help us?	Vector drawing How many layers make an image?	Selection in quizzes Can programs ask questions?
Year 6	Communication and collaboration How does the internet help us to collaborate?	Webpage creation What makes a good website?	Variables in games How can we make games better?	Introduction to spreadsheets How can a spreadsheet help up plan an event?	3D modelling Can computers work in three dimensions?	Sensing Can computers make us healthier?

Key Computing Vocabulary			
KS1	KS2-in addition to KS1 vocabulary		
Algorithm Attribute (property) Code Code snippet Command Computer Data Debugging Information Information technology Object Program Property (attribute) Run (execute) Technology	Browser Computer network Computer system Condition Condition-controlled loop Count-controlled loop Data set Decompose Digital device Domain name Execute (run) Hardware HTML (HyperText Markup Language) Hyperlink	Infinite loop Input Input device Internet Loop (condition controlled, count controlled and infinite) Network Output Output device Procedure Process Repetition Router Selection Server	Software Stored (data) Subroutine Switch (network switch) URL (Uniform Resource Locator) Variable Web Web address Web browser Web page Website WiFi WAP (Wireless Access Point) WWW (World Wide Web)