Gnosall St Lawrence CE Primary Academy
Computing Curriculum Overview

EYFS	30 – 50 months	Understanding the World	Technology	• To know how to operate simple equipment. • To show an interest in technological toys with knobs or pulleys, or real objects. • To show skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements, or new images. • To know that information can be retrieved from computers.
	40-60 months	Understanding the World	Technology	• To complete a simple program on a computer. • To interact with age-appropriate computer software.
	ELG	Understanding the World	Technology	• To recognise that a range of technology is used in places such as homes and schools. To select and use technology for particular purposes.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	Life Online *(See Esafety and DL Entrust Scheme of work overview)*		Programming in the World Around Us *(see progression in programming KS Foundation)*		Lights, Camera, Action! *(see Entrust early years units DC1 and DV1. Also see QCA 1D Labelling and Classifying).*	

	2-Year cycle	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 1
Year 1/2	Cycle A	Going Places Safely and Keep it private *(see common sense media Y1)*		IRobot *(see progression in programming Y1)*	Creating Pictures *(see QCA 2B)*	Lights, Camera, Action! *(see Entrust units DC2 and DV2)*	
	Cycle B	Digital Footprints *(see common sense media Y2)*		Say That Again *(see progression in programming Y2)*		Lights, Camera, Action *(see Entrust unit DV3)*	Multimedia Presentations *(see Entrust unit MM1 and QCA 2E)*
Year 3/4	Cycle A	Powerful Passwords and Respect online *(see common sense media Y3)*		I Teach You Learn *(see progression in programming Y3)*	Let's Animate *(see Entrust Stop Motion Unit)*	Soundscapes *(see QCA 3B and Entrust soundscapes unit)*	Combining Text and Graphics *(see QCA 3A)*
	Cycle B	Private and Personal Information *(see common sense media Y4)*	The Key to Key Words *(see common sense media Y4)*	Inside Out *(see progression in programming Y4)*	Collecting and Presenting Data *(see QCA 4A)*	Multimedia Presentations *(see QCA 6A)*	Mad About Ads (*see Entrust Mad about Ads project)*
Year 5/6	Cycle A	Strong Password and Digital Citizenship *(see common sense media Y5)*	Spam, citations, and Digital image Manipulation *(see common sense media Y5)*	Let's Make it Happen *(see progression in programming Y5 - Probots)*	Let's Animate *(see Entrust stop motion animation Unit - Wideo)*	Multimedia Presentation *(see Entrust unit MM2)*	Introduction to Spreadsheets *(see QCA 5D)*
	Cycle B	Cyber Bullying and Talking Safely Online (*see common sense media Y6)*	Privacy Rules and Selling Stereotypes (*see common sense media Y6)*	Starting from Scratch *(see progression in programming Y6)*		It's a Dogs Life *(see Entrust project)*	Where the Internet Lives *(see Entrust unit)*

Progression of Skills in Computing

	Year 1	Year 2	Year 3/4	Year 4/5	Year 5/6
Handling information (databases and graphs)	• As a class or individually with support, children use a simple pictogram or painting program to develop simple graphical awareness / one to one correspondence.	• Use a graphing package to collect, organise and classify data, selecting appropriate tools to create a graph and answer questions. • Enter information into a simple branching database, database or word processor and use it to answer questions. • They save, retrieve and edit their work.	• Children use a simple database (the structure of which has been set up for them) to enter and save and save information on a given subject. • They follow straight forward lines of enquiry to search their data for their own purposes. • They talk about their experiences of using ICT to process data compared with other methods.	• Children work as a class or group to create a data collection sheet and use it to setup a straightforward database to answer questions. • Enter information and interrogate it (by searching, sorting, graphing etc). • Begin to reflect on how useful the collected data and their interrogation was and whether or not their questions were answered.	• Independently solve a problem by planning and carrying out data collection, by organising and analysing data involving complex searches using a database, and by drawing conclusions and presenting findings. • The need for accuracy is demonstrated and strategies for spotting implausible data are evident. • Children should be able to talk about issues relating to data protection and the need for data security in the world at large (e.g. health, police databases).
Modelling and simulations (spreadsheets, adventure games and simulations)	• Make simple choices to control a simple simulation program.	• Children are able to play an adventure game and use a simple simulation, making choices and observing the results. • Their conversation shows they understand that computers are good at replicating real life events and allowing them to explore contexts that are otherwise not possible.	• Use models and simulations to find things out and solve problems. Recognise that simulations are useful in widening experience beyond the classroom. • Make simple use of a spreadsheet to store data and produce graphs.	• Set up and use a spreadsheet model to explore patterns and relationships. Make predictions. • Know how to enter simple formulae to assist this process.	• Set up and use their own spreadsheet, which contains formulae to investigate mathematical models. Ask "what if …" questions and change variable in their model. • Understand the need for accuracy when creating formulae and check regularly for mistakes, by questioning results. • Relate their use of spreadsheets to model situations to the wider world.

Data logging (science and maths)			• Begin to use a data logger to sense physical data (sound, light, temperature).	• Use a data logger confidently, connected to the computer or remotely, to capture continuous or intermittent data readings. • Interpret the results and use these in their investigations. • Realise the advantages of using ICT to collect data that might otherwise be problematic.	• Children are able to identify their own opportunities for data logging and carry out their own experiments. • They check and question results and are able to spot trends in data and identify when problems may have occurred.
Understanding Technologies (individual technologies)	• Show an awareness of the range of devices and tools they encounter in everyday life	• Show an awareness of a range of inputs to a computer (IWB, mouse touch screen, microphone, keyboard, etc)	• Begin to show discernment in their use of computing devices and tools for a particular purpose and explain why their choice was made.	• Make choices about the devices and tools they use for specific purposes and explain them in relation to the context. • Begin to show an awareness of specific tools used in working life.	• Evaluate the tools available to them including any that are unfamiliar or new and use them to solve problems. • Demonstrate an awareness of the appropriateness of outcomes depending on choices regarding tools and devices.
Understanding Technologies (networks)	• Show an awareness that what they create on a computer or tablet device can be shown to others via another device (e.g. printer, projector, Apple TV)	• Begin to show an awareness that computers can be linked to share resources	• Show an understanding that their password is the key to accessing a personalised set of resources and files (e.g. My Documents). • Show an awareness of where passwords are critical in everyday use (e.g. parents accessing bank details)	• Show an understanding of the school network and how it links computers to resources in school and beyond. • Compare this with other networks they may encounter at home or in the wider world (e.g. banks)	• Show an understanding of how filtering and monitoring tools affect their use of the school network and Internet and compare this with their experience of access outside school.
Understanding Technologies (the internet)		• Use websites and demonstrate an awareness of how to manage their journey around them (e.g. using the back/forward button, hyperlinks)	• Show an awareness that not all the resources/tools they use are resident on the device they are using. • Begin to show an understanding of URLs.	• Perform a search using different search engines and check the results against each other, explaining why they might be different. • Show an awareness of the need for accuracy in spelling and syntax to search effectively.	• Use collaborative tools and e-mail showing a sensitivity for this type of remote collaboration and communication