Bury and Whitefield
JEWISH PRIMARY SCHOOL

LOVE YOUR NEIGHBOUR AS YOURSELF

Computing

End Points

These end points should be used to recap and revisit learning from previous years, during 'Flashback' time. This will enable stronger schema to be built, supporting our children to remember key facts.

Our Curriculum Celebrates
Resilience
Creativity
Critical Thinking
Curiosity
Challenge
Culture

Computing Systems and Networks			
EYFS	**KS1**	**LKS2**	**UKS2**
• To know the main parts of a computer. • To tinker and explore with different computer hardware. • Be able to use the keyboard and mouse. • Be able to login and out. • To learn how to operate a camera.	• To navigate around a computer. • To develop mouse skills. • To learn how to drag, drop, click and control a cursor to create works of art. • To explore what a computer is. • To identify how inputs and outputs work. • To know how computers used in the wider world. • To design their own computerised invention. • To develop touch typing skills. • To know some keyboard shortcuts. • To know simple editing tools.	• To know what a network is. • To know how devices communicate and share information. • To be able to send emails with attachments. • To understand what cyberbullying is. • To know how a computer works • To know how to work collaboratively. • Be able to explore a range of collaborative tools. • To be able to research and store data on spreadsheets.	• To be able to explain how page rank works and how to identify inaccurate information. • To know the history of Bletchley Park. • To know ways of code breaking and password hacking. • To demonstrate digital literacy skills by creating presentations.

Creating Media			
EYFS	KS1	LKS2	UKS2
•	• To be able to edit photos. • To be able to search and add images to a project. • To be able to create simple animations.	• To be able to create trailers, with special effects and transitions. • To solve problems effectively using the four areas of abstraction, algorithm design, decomposition and pattern recognition.	• To be able to create animations, storyboard ideas. • To create an illusion of a moving image. • To write, record and edit radio plays. • To know how computers have evolved.

Data Handling			
EYFS	**KS1**	**LKS2**	**UKS2**
• To be able to sort and categorise data. • To begin to use branching databases and pictograms.	• To learn what data is and the different ways it can be represented. • To know why data is useful. • To know why data is useful. • To know how data is collected, used and displayed.	• To know records, fields and data and sorting and filtering data. • To research and store data on spreadsheets and design a weather station.	• To explore how and why it transfers data including instructions. • To know how messages can be sent using binary code. • To identify how barcodes and QR codes work. • To know infrared waves are used to transmit data. • To recognise the uses of RFID. • To understand how networks share information. • To know big data can be used to design smart buildings.

Online Safety			
EYFS	**KS1**	**LKS2**	**UKS2**
•	• To explain how to stay safe online. • To manage feelings and emotions. • Be able to explain how to keep information safe and private online. • To know who we should ask before sharing things online. • To be able to give, or deny permission online.	• To know the difference between fact, opinion and belief. • To know to deal with upsetting online content. • To know how to protect personal information online. • To be able to search for information and make a judgement about the probable accuracy. • To recognise adverts and pop-ups. • To understand that technology can be distracting.	• To learn about app permissions. • To be able to discuss the positive and negative aspects of online communication. • To know that online information is not always actual. • To know how to deal with online bullying. • To be able to manage our health and wellbeing. • To be able to deal with online issues. • To explain the impact and consequences of sharing information online. • To know how to develop a positive online reputation. • To combat and deal with online bullying. • To be able to create protective passwords.

Programming			
EYFS	**KS1**	**LKS2**	**UKS2**
• To receive and give instructions. • To know directions. • To understand the importance of precise instructions. • To program a Bee- Bot. • To tinker with hardware.	• To follow directions (algorithms) and know why instructions need to be specific. • Explain the functions of a Bee-Bot. • To begin to understand what algorithms are. • To program algorithms. • To begin to use loops. • To explore what blocks do. • To program a familiar story and make a musical instrument.	• To follow the predict, test, review. • To program an animation, story and game. • To begin to use variables in code scripts.	• To create different sounds, beats and melodies. • Able to create algorithms and programs that are used in the real world. • To predict, test, evaluate and debug programs with specific aims. • Able to use the programming language 'Python' to create designs and art. • Able to create loops and nested loops to code more efficiently.