



Wheeler's Lane Primary School Curriculum Concepts and Knowledge Journey

STEM Faculty: Computing

The building blocks of learning. Our concepts stem from our whole school curriculum intent and thread through our entire school curriculum.

Strand	Year 1			Year 2			Year 3		
Focus	Introduction to BGFL365	Create and debug a simple program	Gather data and create charts	Programming: characters interacting	Make an eBook relating to Science topic	Presenting research	Powerpoint presentation	Programming: drawing images and shapes	Introduction to databases (and spreadsheets)
Key Question	How can I represent myself online?	How are computer programs used in daily life?	How could a pictogram be useful to us?	Can you think of films that have characters programmed by a computer?	How does a computer network work?	What is copyright?	How can we search for information responsibly?	Why is debugging an important part of programming?	What does a database do?
Concept 1 Heritage (Birmingham)	Key aspects of my life/community					Could be based on a local topic			Cost of houses in the local area
Concept 2 Communication					Cloud computing – computer networks?				
Concept 3 Powerful Stories				Success of Toy Story/Frozen		Legal battles between Apple and Samsung		The Millennium Bug	
Concept 4 Sustainability, Rights and Responsibilities	Is it important to have access online. Link to Article 17	Impact on jobs		Animated films with an environmental message eg. Wall-E, The Lorax	How can we protect habitats in the local area?		Issues around copyright		Why do we need data protection?
Concept 5 Creativity and Enrichment	Being creative with a computer-based identity					Ways digital presentations are better than hard copies			
Concept 6 Me - now and in the future	The need for an online profile	What in the future might be programmed by computers?			How can technology be used in the future to protect the environment?				Could a database help me in my career aspiration?
Subject area 1	Use technology purposefully to create digital content	Understand what algorithms are	Use technology to present my ideas in different ways	Understand how algorithms are implemented on digital devices	Use technology to present and organise my ideas in different ways	Use technology purposefully to create and manipulate digital content	Create a range of content that accomplish given goals	Design, write and debug programs	Use search technologies effectively
Subject area 2	Identify where to go for help with concerns	Create and debug simple programs	Use technology purposefully to organise digital content	Programs are executed by following precise and	Save and open files on the device I use	Where to go for help with concerns	Use a variety of digital software (including internet services)	Use sequence in my programs	Sort and filter data from a database

				unambiguous instructions					
Subject area 3	Importance of keeping personal information private	Use logical reasoning to predict the behaviour of programs	Use technology safely and respectfully	Understand where to find help if concerned about digital content	Importance of keeping personal information private	Develop an awareness of copyright	Use search technologies effectively	Detect and correct errors in programs	Create charts from within a database