Key stage	Learning theme	Key idea	Mapping to 2014 Computing Curriculum
Lower KS2	Accuracy Counts	Children discuss computer networks including the internet and the services it offers. They explore how search engines work and what influences results, evaluating search engines and using sources. They learn about the threat from computer viruses and develop understanding of intellectual property and relate this to their own content. They use spreadsheet software to create graphs and to explore number patterns.	2.iv 2.v 2.vi 2.vii
	Authoring	Children investigate computing storage capacities and ways of saving data. They develop understanding of the school network and operating systems. They use varied resources to create digital content, creating and manipulating images and words. They select and use software to create non-linear content for specific audiences and objectives.	2.v 2.vi 2.vii
	Bringing Images to Life	Children develop understanding of digital images. They transform and edit images, respecting copyright and ownership. They explore stop animation creating their own versions. They produce programmed animations, using sequence, repeat and selection.	2.i 2.ii 2.iii 2.vi 2.vii
	Developing Communication	Children use online communication tools such as email and blogs to support collaborative learning, safely and respectfully. They begin to investigate the technology used in digital communication networks. They use simple sound editing software to record and manipulate sound clips.	2.iv 2.vi 2.vii
	Keeping Informed	Children understand the difference between data and information. They use sensors, data-loggers and other tools as part of their investigations. They use branching and flat-file databases to enter, organise and search data, deriving information which they present in different forms.	2.i 2.ii 2.iii 2.vi 2.vii
	Programming and Games	Children explore simulations, investigating the structure and exploring how they might be programmed. They begin to note that abstraction can simplify them. They decompose tasks, creating and debug algorithms and understanding how algorithms support the programming process. They write, test, debug and refine programs to achieve specific objectives, using sequence, repetition and procedures. They explore selection in digital and natural systems.	2.i 2.ii 2.iii 2.vi 2.vii
Upper KS2	Data Matters	Children investigate the concept of “big data” and its use in the world. They review file types and protection. They explore binary form and develop understanding of computer networks. They search more efficiently and investigate their digital footprints (or ‘digital tattoos’), building safe and responsible use of online spaces. They create and search flat-file databases, developing accuracy and efficiency.	2.iii 2.iv 2.v 2.vi 2.vii
	Information Models	Children develop expertise in spreadsheets, using both formulae and functions. They import and analyse data collected on data-loggers. They use conditional formatting to vary the format of cells and create tools for specific user needs. They create models, identifying variables and using what-if modelling.	2.i 2.ii 2.vi 2.vii
	Morphing Image	Children use 3D graphical modelling to create and explore objects. They review operating systems. They evaluate films and animations, going on to create live film or animations for specific audiences. They demonstrate their understanding of copyright and ownership.	2.vi 2.vii
	Robotics and Systems	Children investigate automated systems in the wider world and the use of sensors within them. They consider natural systems and use abstraction to represent them. They create, test, debug and refine algorithms, pseudocode and the related programs using sequence, selection, repetition and variables. They program physical devices, controlling inputs and outputs, relating to their study of automated systems.	2.i 2.ii 2.iii 2.vi 2.vii
	Sound Works	Children review how digital sound is used in the world and how it has developed over time. They create multi-track sound recordings for specific audiences, incorporating different content and demonstrating their understanding of the rules for copyright. They use programming languages to create their own sound clips.	2.vi 2.vii
	Staying Connected	Children develop safe and appropriate use of online technologies, considering what they can use and what information is shared about them. They create blogs for school projects, checking and uploading digital content. They understand how a wiki works and the benefits of collaborative working. They know the school’s eSafety rules and are proactive in encouraging other children to keep safe online.	2.iv 2.v 2.vi 2.vii

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Primary Computing Scheme