

Computing			Year 1		
Key: Find information: 		Process: 	Communicate: 	Refine: 	
Autumn Term Topic Area: Technology Today		Spring Term Topic Area: Brilliant Bee-Bots!		Summer Term Topic Area: Going Solo	
<u>Key skills</u> Investigate uses of information technology around and outside of school e.g. alarm clock, i-pad, digital TV, GPS, register-Simms Create digital work such as word processing, create pictures with paint packages, introduce use of camera Open and save work to be used again later Use ICT safely by following instructions Discuss and share work created with others and describe use of ICT		<u>Key skills</u> Navigate onscreen resources to explore and locate information following a precise set of instructions Create a set of commands for Bee-bot Use ICT to communicate with others following instructions on safe use Collaborate with others to use simple programmes and devices Explore how devices respond to commands Plan and give instructions to make things happen, control devices and describe effects		<u>Key skills</u> Find and use information to answer questions Capture information and share work with others such as using digital camera to record use of Bee-bots Use ICT to communicate with others following instructions on safe use Collaborate with others to use simple programmes and devices Begin to manipulate digital content - using simple editing and formatting techniques to develop work.	
<u>Knowledge</u> To know and recognise common uses of information technology beyond school To understand how to open and save work To know how to use simple technology such as paint, draw, word programmes or camera function on i-pad/ camera to create, store and retrieve digital content		<u>Knowledge</u> To understand an algorithm simply as a sequence of instructions To understand term debug as fixing a mistake To know how to create and debug simple programmes e.g. using Bee-bot		<u>Knowledge</u> To know how to use simple programs confidently To understand how to use word to edit, format text for a purpose e.g. caption for photographs Understand how to use technology safely and respectfully; know how to use internet or other online technologies safely (Thinkuknow.co.uk)	

Computing			Year 2		
Key: Find information: ■		Process: ■	Communicate: ■	Refine: ■	
Autumn Term	Spring Term	Summer Term			
Topic Area: All about Me!	Topic Area: Perfect Programs!	Topic Area: Going Solo 2!			
<u>Key skills</u> Find and use information to answer questions Create digital work such as word processing, publisher, working with digital photography and video Sort and organise information and present it in different forms e.g. ordering series of photographs, organise files in documents, tag photos Manipulate digital content - combining text and images from multiple sources thinking about audience Use ICT to communicate with others following instructions on safe use Begin to use editing and formatting techniques to develop and refine work to improve its quality and presentation	<u>Key skills</u> Make sensible choices when using ICT to fit a particular purpose Create a set of commands for a simple program - floor turtle, Bee-bot Answer questions when using ICT models and stimulations Collaborate with others to exchange ideas on how to use simple programmes and devices successfully Use logical reasoning to predict behaviour of simple programs e.g. role-play a floor turtle/ Bee-bot while another pupil steps through program Use sequences of instructions to make things happen, control devices for a planned outcome	<u>Key skills</u> Begin to use information from a range of sources Begin to make decisions about the usefulness of information Collect, record and organise information in different forms including graphs e.g. digital devices used by Y2 in the home Store and retrieve digital content independently Use ICT to communicate with others following instructions on safe use Collaborate with others to exchange ideas on how to use simple programmes and devices successfully Use editing and formatting techniques to develop and refine work to improve its quality and presentation			
<u>Knowledge</u> To know how to use programs such as word, publisher confidently and devices such as digital camera To know how to insert graphics, photos from other sources into a document To know how to edit and format text To understand how to use technology safely	<u>Knowledge</u> To understand and use the term algorithm To understand and use the term debug To know how to create and debug simple programs successfully e.g. using Bee-bot, floor turtles	<u>Knowledge</u> To know how to use programs confidently To store and retrieve digital content independently To understand how to use word to edit and format work Understand how to use technology safely and respectfully; know how to use internet or other online technologies safely (Thinkuknow.co.uk)			

Computing			Year 3		
Key: Find information: ■		Process: ■	Communicate: ■		Refine: ■
Autumn Term Topic Area: Roaming Around!	Spring Term Topic Area: Refining Roaming!	Summer Term Topic Area: E-Safety			
<u>Key skills</u> Use logical reasoning to explain simple algorithms work and to detect errors Create simple programs together Planning a linear sequence of instructions Communicate and share ideas about simple programs with others Debug simple programs	<u>Key skills</u> Use logical reasoning to explain how simple algorithms work and to detect errors Plan and give a linear a sequence set of instructions to make things happen Present data in a systematic way for others to be able to process (follow e.g. flow chart) Develop and improve their instructions	<u>Key skills</u> Make decisions about usefulness of information Identify ways to stay safe in a digital society Using strategies for staying safe Identify suitable information to present			
<u>Knowledge</u> To understand what algorithms are, how they are implemented as programs on digital devices (computer, phones, I-pads) To know how to create a simple program and debug simple programs (Roamers) To understand how ICT will be used to create a task To know how to give simple instructions	<u>Knowledge</u> To know how to give simple instructions To understand how to refine a set of instructions To understand techniques to present data in a systematic way Understand how to use technology safely and respectfully	<u>Knowledge</u> To know how to stay safe in a digital society To begin to use internet searches effectively To show understanding of important people and events in the history of computing Understand how to use technology safely and respectfully; know how to use internet or other online technologies safely (Think u know.co.uk)			

Computing			Year 4		
Key: Find information: 		Process: 	Communicate: 	Refine: 	
Autumn Term Topic Area: Introduction to Scratch!		Spring Term Topic Area: Using Scratch!		Summer Term Topic Area: E-Safety	
<u>Key skills</u> Use logical reasoning to explain simple algorithms work and to detect errors Create simple programs together Planning a linear sequence of instructions Communicate and share ideas about simple programs with others Debug simple programs		<u>Key skills</u> Use logical reasoning to explain how simple algorithms work Begin to design, write and debug programs Begin to use programs with simple variables Present data in a structured format suitable for processing e.g. simple algorithms diagrammatically Evaluate how successful programs have been To detect and correct errors in algorithms		<u>Key skills</u> Make decisions about usefulness of information Question the reliability of information Identify ways to stay safe in a digital society through reporting concerns about content and contact Select, use and combine a variety of software to design and create a poster Create and combine different forms of information, refining and presenting it for a particular purpose Using and communicating strategies for staying safe Identify suitable information to present	
<u>Knowledge</u> To know and explain what algorithms are To know how to create a simple program and debug simple programs (using Scratch) To understand how ICT will be used to create a task To know how to give simple instructions		<u>Knowledge</u> To know how to use programs such as Scratch To begin to understand what a variable is To know how to design, write and debug programs		<u>Knowledge</u> To create E-Safety poster combining software To use internet searches effectively Understand how to use technology safely and respectfully; recognise acceptable/unacceptable behaviour To know how to report concerns about content and contact (Think u know.co.uk)	

Computing			Year 5 and Year 6		
Key: Find information: ■		Process: ■	Communicate: ■	Refine: ■	
Autumn Term Topic Area: Super Scratch!	Spring Term Topic Area: Alternative Algorithms	Summer Term Topic Area: World Wide Web!			
<u>Key skills</u> Use logical reasoning to explain how algorithms work Design, write and debug programs Use programs with simple variables Present data in a structured format suitable for processing e.g. simple algorithms diagrammatically Evaluate how successful programs have been To detect and correct errors in algorithms	Analyse and represent symbolically a sequence of events Design, write and debug programs Use programs with variables Use sequence, selection and repetition in programs Use variables and various forms of input and output Present data in a structured format suitable for processing e.g. simple algorithms diagrammatically Evaluate how successful programs have been To detect and correct errors in algorithms	<u>Key skills</u> Begin to identify and explain networks in and out of school Select, use and combine a variety of software to design and create a poster Create and combine different forms of information, refining and presenting it for a particular purpose (booklet on the world wide web; uses, pros, cons) Present data in a structured format suitable for processing Evaluate information used			
<u>Knowledge</u> To know how to use programs such as Scratch independently To understand and use the term variable To know how to design, write and debug programs	<u>Knowledge</u> To recognise different types of data; text, number and instruction To understand the need for care and precision when giving instructions/ inputting a sequence To know how to debug algorithms To understand and use the term variable To design, write and debug programs	<u>Knowledge</u> To understand what a network is To understand computer networks, including the internet To begin to know how they provide multiple services, such as world wide web; and opportunities for communication and collaboration Understand how to use technology safely and respectfully; recognise acceptable/ unacceptable behaviour To know how to report concerns about content and contact (Think u know.co.uk)			

Due to a very new and challenging computing curriculum, for Sept 2014, Y5 and Y6 will phase plan for the teaching of computing skills, following Y5 overview. This is to ensure Y6 pupils have the skills and prior knowledge needed to successfully transition into the Y7 computing curriculum. In Sept 2015, a new Y6 overview will be in place for the current Y5 to follow, building on their skills.

