

Sandown Computing Map KS1 & 2 2016-17

See the 'New curriculum folders' for more detailed skills, level descriptors, ideas, planning examples and other resources.

Green = Digital Literacy Blue = Information Technology Red = Computer Science

National curriculum statements are shown in white with bold showing the section particularly relevant to that year group.

Year group	General skills	E-Safety	Online	Presentation	Maths	Images	Others	Programming	Programming
Year 1	General skills – Approximately 1 week per year group. Primarily to be taught as part of Presentation units, &/or integrate with other lessons as appropriate.	E safety <i>3 weeks</i> use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies	Technology beyond school <i>3 weeks</i> recognise common uses of information technology beyond school	Presentation <i>Clicker 5</i> <i>2 Publish</i> <i>2create a story</i> <i>6 weeks</i> use technology purposefully to create, organise, store, manipulate and retrieve digital content	Pictograms <i>2count</i> <i>6 weeks</i> use technology purposefully to create, organise, store, manipulate and retrieve digital content	Creating pictures <i>2 Paint</i> <i>2 Draw</i> <i>Tuxpaint</i> <i>3weeks</i> use technology purposefully to create, organise, store, manipulate and retrieve digital content	Algorithms <i>3 weeks</i> understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions	Simulations <i>Tizzy's Toybox</i> <i>My world</i> <i>6 weeks</i> use logical reasoning to predict the behaviour of simple programs	Programming <i>Operating simple equipment/toys</i> <i>Beebots</i> <i>Roamers</i> <i>6 weeks</i> create and debug simple programs
Year 2		E safety <i>3 weeks</i> use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies	Parts of a computer <i>3 weeks</i> understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration	Presentation <i>Word6</i> <i>6 weeks</i> use technology purposefully to create, organise, store, manipulate and retrieve digital content	Graphs <i>2 Graph</i> <i>6 weeks</i> use technology purposefully to create, organise, store, manipulate and retrieve digital content		Datalogging <i>Logit</i> <i>6 weeks</i> use technology purposefully to create, organise, store, manipulate and retrieve digital content	Simulations <i>Crayon physics</i> <i>Duck builder</i> <i>Food chain</i> <i>6 weeks</i> use logical reasoning to predict the behaviour of simple programs	Programming <i>Beebots</i> <i>Roamer</i> <i>2 Go</i> <i>6 weeks</i> create and debug simple programs

Year 3		<p>E safety 3 weeks</p> <p>use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>	<p>www 3 weeks</p> <p>understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration</p>		<p>Branching database 2Question Flexitree 6 weeks</p> <p>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p>	<p>Animation 2Animate 6 weeks</p> <p>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p>	<p>Algorithms & Logic 6 weeks</p> <p>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p>	<p>Simulations Crayon Physics Testing Parachute Plant force 6 weeks</p> <p>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p>	<p>Programming Robots Big Track Lightbot 2 6 weeks</p> <p>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p>
Year 4		<p>E safety 3 weeks</p> <p>use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>	<p>Communicate online Email Messaging Blogging 3 weeks</p> <p>understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration</p>	<p>Presentation Publisher 3 weeks</p> <p>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p>	<p>Using a database 2 Investigate6 6 weeks</p> <p>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p>	<p>Animation Pivot 6 weeks</p> <p>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p>	<p>Music Dance EJay 3 weeks</p> <p>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p>	<p>Simulations BBC Virtual Gardener Roller coaster Design a satellite 6 weeks</p> <p>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p>	<p>Programming Blockly K-8 6 weeks</p> <p>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p>

Year 5		<p>E safety 3 weeks</p> <p>use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>	<p>Choosing - web 3 weeks</p> <p>use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p>	<p>Presentation Powerpoint 6 weeks</p> <p>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p>	<p>Spreadsheets Excel6 6 weeks</p> <p>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p>	<p>Manipulating images Be funky (Autocollage) 3 weeks</p> <p>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p>	<p>Audio Audacity 3 weeks</p> <p>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p>	<p>Simulations Northumberland Fairground Rides Sketch up 6 weeks</p> <p>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p>	<p>Programming Robomind Tynker 6 weeks</p> <p>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p>
Year 6		<p>E safety 3 weeks</p> <p>use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>	<p>Create a web site Google sites Weebly Yola 6 weeks</p> <p>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p>	<p>Presentation Prezzi 6 weeks</p> <p>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p>	<p>Spreadsheets Excel 6 weeks</p> <p>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p>			<p>Programming Kodu 6 weeks</p> <p>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p> <p>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p>	<p>Programming Scratch 6 weeks</p> <p>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p> <p>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p>

