

Year 3 Computing Medium Term Planning

Year 3	Information Technology	Digital Literacy/e-Safety	Computer Science
<p style="text-align: center;">Autumn 1</p> <p>Link to further resources:</p> <p><u>Computing systems and networks</u> <i>Connecting computers</i></p> <p>Unplugged Activities</p>	<ul style="list-style-type: none"> ● Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. ● 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. 	<ul style="list-style-type: none"> ● Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. 	
	Key Skills/Knowledge	Key Skills/Knowledge	Key Skills/Knowledge
	<ul style="list-style-type: none"> ● I can explain that digital devices accept inputs. ● I can explain that digital devices produce outputs. ● I can follow a process. ● I can classify input and output devices. ● I can describe a simple process. ● I can design a digital device. ● I can explain how I use digital devices for different activities. 	<ul style="list-style-type: none"> ● I can use technology safely and respectfully. ● I can keep my personal login information safe. ● I can login to different programs, devices and applications using different login information. ● I can ask for help. ● I can report any suspicious activity or information that I see. 	

- I can recognise similarities between using digital devices and using non-digital tools.
- I can suggest differences between using digital devices and using non-digital tools.
- I can recognise different connections.
- I can explain how messages are passed through multiple connections.
- I can discuss why we need a network switch.
- I can recognise that a computer network is made up of a number of devices.
- I can demonstrate how information can be passed between devices.
- I can explain the role of a switch, server, and wireless access point in a network.
- I can identify how devices in a network are connected together.
- I can identify networked devices around me.
- I can identify the benefits of computer networks.

<p>Autumn 2</p> <p>Link to further resources:</p> <p>Creating media <i>Animation</i></p> <p>iMotion</p> <p>Stickbot</p>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. 	
	Key Skills/Knowledge	Key Skills/Knowledge	Key Skills/Knowledge
	<ul style="list-style-type: none"> I can draw a sequence of pictures. I can create an effective flip book—style animation. I can explain how an animation/flip book works. I can predict what an animation will look like. I can explain why little changes are needed for each frame. I can create an effective stop-frame animation. I can break down a story into settings, characters and events. 	<ul style="list-style-type: none"> I can use technology safely and respectfully. I can keep my personal login information safe. I can login to different programs, devices and applications using different login information. I can ask for help. I can report any suspicious activity or information that I see. I can plug an iPad in to charge. I can locate the Stikbot or iMotion app on the iPad. 	

	<ul style="list-style-type: none"> • I can describe an animation that is achievable on screen. • I can create a storyboard. • I can use onion skinning to make small changes between frames. • I can review a sequence of frames to check my work • I can evaluate the quality of my animation. • I can explain ways to make my animation better. • I can evaluate another learner's animation. • I can improve my animation based on feedback. • I can add other media to my animation. • I can explain why I added other media to my animation. • I can evaluate my final film. 		
<p>Spring 1</p> <p>Link to further resources:</p> <p>Creating media <i>Desktop publishing</i></p> <p>Google Docs</p> <p>Google Slides</p>	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. 	

	Key Skills/Knowledge	Key Skills/Knowledge	Key Skills/Knowledge
	<ul style="list-style-type: none"> ● I can explain the difference between text and images. ● I can recognise that text and images can communicate messages clearly. ● I can identify the advantages and disadvantages of using text and images. ● I can change font style, size, and colours for a given purpose. ● I can edit text. ● I can explain that text can be changed to communicate more clearly. ● I can explain what 'page orientation' means. ● I can recognise placeholders and say why they are important. ● I can create a template for a particular purpose. ● I can choose the best locations for my content. ● I can paste text and images to create a magazine cover. ● I can make changes to content after I've added it. ● I can identify different layouts. ● I can match a layout to a purpose. ● I can choose a suitable layout for a given purpose. ● I can identify the uses of desktop publishing in the real world. 	<ul style="list-style-type: none"> ● I can use technology safely and respectfully. ● I can keep my personal login information safe. ● I can login to different programs, devices and applications using different login information. ● I can ask for help. ● I can report any suspicious activity or information that I see. ● I can search for appropriate images using appropriate search terms. 	

	<ul style="list-style-type: none"> • I can say why desktop publishing might be helpful. • I can compare work made on desktop publishing to work created by hand. 		
<p>Spring 2</p> <p>Link to further resources:</p> <p>Data and information <i>Branching databases</i></p> <p>J2E</p>	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. 	
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	<ul style="list-style-type: none"> • I can investigate questions with yes/no answers. • I can make up a yes/no question about a collection of objects. • I can create two groups of objects separated by one attribute. • I can select an attribute to separate objects into groups. • I can create a group of objects within an existing group. • I can arrange objects into a tree structure. • I can select objects to arrange in a branching database. • I can group objects using my 	<ul style="list-style-type: none"> • I can use technology safely and respectfully. • I can keep my personal login information safe. • I can login to different programs, devices and applications using different login information. • I can ask for help. • I can report any suspicious activity or information that I see. • I can find J2E by using a search engine to search for it or by using the web page address. 	

	<p>own yes/no questions.</p> <ul style="list-style-type: none"> ● I can test my branching database to see if it works. ● I can create yes/no questions using given attributes. ● I can compare two branching database structures. ● I can explain that questions need to be ordered carefully to split objects into similarly sized groups. ● I can independently create questions to use in a branching database. ● I can create questions that will enable objects to be uniquely identified. ● I can create a physical version of a branching database. 		
<p>Summer 1</p> <p>Link to further resources:</p> <p>Programming A <i>Sequence in music</i></p> <p>Scratch 3.0</p> <p>Hour of Code</p> <p>Code for Life</p>		<ul style="list-style-type: none"> ● Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. 	<ul style="list-style-type: none"> ● Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. ● Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. ● Use logical reasoning to explain how some simple algorithms

			work and to detect and correct errors in algorithms and programs.
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			<ul style="list-style-type: none"> ● I can decide the actions for each sprite in a program, ● I can make design choices for my artwork. ● I can identify and name the objects I will need for a project. ● I can relate a task description to a design. ● I can implement my algorithm as code.
<p style="text-align: center;">Summer 2</p> <p>Link to further resources:</p> <p style="text-align: center;"><u>Programming B</u> <i>Events and actions</i></p> <p style="text-align: center;">Scratch 3.0</p> <p style="text-align: center;">Code for Life</p>		<ul style="list-style-type: none"> ● Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. 	<ul style="list-style-type: none"> ● Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. ● Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. ● Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.
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			<ul style="list-style-type: none">• I can make design choices and justify them.• I can implement my design.• I can evaluate my project.
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GDS Opportunities	<ul style="list-style-type: none">• Children search by keyword using a child friendly search engine.• Children bookmark a page into their favourites.• Children begin to contribute to a class blog.• Children use the repeat command in Logo to create a pattern.
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