

Year 2 Computing Medium Term Planning

Year 2	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>IT around us</i></p>	<ul style="list-style-type: none"> ● 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. ● Use technology purposefully to create, organise, store, manipulate and retrieve digital content. ● Recognise common uses of information technology beyond school. 	<ul style="list-style-type: none"> ● 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. ● Recognise common uses of information technology beyond school. 	
	Key Skills/Knowledge	Key Skills/Knowledge	Key Skills/Knowledge
	<ul style="list-style-type: none"> ● I can identify examples of computers. ● I can describe some uses of computers. ● I can identify that a computer is a part of IT. ● I can identify examples of IT. ● I can sort school IT by what it's used for. 	<ul style="list-style-type: none"> ● I can list different uses of information technology. ● I can talk about different rules for using IT. ● I can say how rules can help keep me safe. ● I can identify the choices that I make when using IT. 	

	<ul style="list-style-type: none"> ● I can identify that some IT can be used in more than one way. ● I can find examples of information technology. ● I can sort IT by where it is found. ● I can talk about uses of information technology. ● I can recognise common types of technology. ● I can demonstrate how IT devices work together. ● I can say why we use IT. ● I can use IT for different types of activities. ● I can explain the need to use IT in different ways. 		
<p>Autumn 2</p> <p>Link to further resources:</p> <p>Creating media <i>Digital photography</i></p> <p>Resources:</p> <p>iPads</p> <p>Digital Cameras</p>	<ul style="list-style-type: none"> ● 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. ● Use technology purposefully to create, organise, store, manipulate and retrieve digital content. 	<ul style="list-style-type: none"> ● 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. ● Recognise common uses of information technology beyond school. 	
	<p>Key Skills/Knowledge</p>	<p>Key Skills/Knowledge</p>	<p>Key Skills/Knowledge</p>

- I can recognise which devices can be used to take photographs.
- I can talk about how to take a photograph.
- I can explain what I did to capture a digital photo.
- I can explain the process of taking a good photograph.
- I can take photos in both landscape and portrait format.
- I can explain why a photo looks better in portrait or landscape format.
- I can identify what is wrong with a photograph.
- I can discuss how to take a good photograph
- I can improve a photograph by retaking it.
- I can explore the effect that light has on a photo.
- I can experiment with different light sources.
- I can explain why a picture may be unclear.
- I can recognise that images can be changed.
- I can use a tool to achieve a desired effect.
- I can explain my choices.

- I can use digital technology safely and respectfully.
- I can turn on an iPad and locate the camera app.
- I can close the camera app.
- I can delete photographs from devices once they have been uploaded to a computer.
- I can turn a digital camera on or off.
- I can hold devices safely.
- I can charge an iPad.
- I can change the batteries in a digital camera.

	<ul style="list-style-type: none"> • I can apply a range of photography skills to capture a photo. • I can recognise which photos have been changed. • I can identify which photos are real and which have been changed. 		
<p>Spring 1</p> <p>Link to further resources:</p> <p>Creating media <i>Making music</i></p> <p>Program: Google Chrome Music Lab</p>	<ul style="list-style-type: none"> • 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. • Use technology purposefully to create, organise, store, manipulate and retrieve digital content. 	<ul style="list-style-type: none"> • 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. • Recognise common uses of information technology beyond school. 	
	<p>Key Skills/Knowledge</p>	<p>Key Skills/Knowledge</p>	<p>Key Skills/Knowledge</p>
	<ul style="list-style-type: none"> • I can identify simple differences in pieces of music. • I can describe music using adjectives. • I can say what I do and don't like about a piece of music. • I can create a rhythm pattern. 	<ul style="list-style-type: none"> • I can use digital technology safely and respectfully. • I can keep my personal login information safe. • I can use my personal login details to login to a Chromebook. 	

	<ul style="list-style-type: none"> • I can play an instrument following a rhythm pattern. • I can explain that music is created and played by humans. • I can connect images with sounds. • I can use a computer to experiment with pitch. • I can relate an idea to a piece of music. • I can identify that music is a sequence of notes. • I can explain how my music can be played in different ways. • I can refine my musical pattern on a computer. • I can create a rhythm which represents an animal I've chosen. • I can create my animal's rhythm on a computer. • I can add a sequence of notes to my rhythm. • I can review my work • I can explain how I changed my work. • I can listen to music and describe how it makes me feel. 	<ul style="list-style-type: none"> • I can login and access Chrome Music Lab. • I can ask for help. • I can tell an adult if I see something I am unsure of. 	
<p>Spring 2 Link to further resources:</p>	<ul style="list-style-type: none"> • Use technology safely and respectfully, keeping personal information private; identify 	<ul style="list-style-type: none"> • Use technology safely and respectfully, keeping personal information private; identify 	

<p><u>Data and information</u> <i>Pictograms</i></p> <p>Suggested Activities:</p> <p>Unplugged Activities</p> <p>J2E</p>	<p>where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</p> <ul style="list-style-type: none"> • Use technology purposefully to create, organise, store, manipulate and retrieve digital content. 	<p>where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</p> <ul style="list-style-type: none"> • Recognise common uses of information technology beyond school. 	
	<p>Key Skills/Knowledge</p>	<p>Key Skills/Knowledge</p>	<p>Key Skills/Knowledge</p>
	<ul style="list-style-type: none"> • I can record data in a tally chart. • I can represent a tally count as a total. • I can compare totals in a tally chart. • I can enter data onto a computer • I can use a computer to view data in a different format. • I can use pictograms to answer simple questions about objects • I can organise data in a tally chart. • I can use a tally chart to create a pictogram. • I can explain what the pictogram shows. • I can tally objects using a common attribute. • I can create a pictogram to arrange objects by an attribute. • I can answer 'more than'/'less 	<ul style="list-style-type: none"> • I can use digital technology safely and respectfully. • I can keep my personal login information safe. • I can use my personal login details to login to a Chromebook. • I can use a computer program to present information in different ways. • I can share what I have found out using a computer. • I can give simple examples of why information should not be shared. 	

	<p>than' and 'most/least' questions about an attribute.</p> <ul style="list-style-type: none"> ● I can choose a suitable attribute to compare people. ● I can collect the data I need. ● I can create a pictogram and draw conclusions from it. 		
<p>Summer 1</p> <p>Link to further resources:</p> <p>Programming A <i>Robot algorithms</i></p> <p>Beebots</p> <p>LEGO Wedo</p> <p>Code For Life</p>		<ul style="list-style-type: none"> ● 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. ● Recognise common uses of information technology beyond school. 	<ul style="list-style-type: none"> ● Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. ● Create and debug simple programs. ● Use logical reasoning to predict the behaviour of simple programs. ● Use technology safely and respectfully.
	<p>Key Skills/Knowledge</p>	<p>Key Skills/Knowledge</p>	<p>Key Skills/Knowledge</p>
		<ul style="list-style-type: none"> ● I can use digital technology safely and respectfully. ● I can turn an iPad on and off. ● I can locate and open the Scratch Jr. app. ● I can save my work. 	<ul style="list-style-type: none"> ● I can follow instructions given by someone else ● I can choose a series of words that can be acted out as a sequence ● I can give clear instructions

- I can plug an iPad in to charge.

- I can use the same instructions to create different algorithms
- I can use an algorithm to program a sequence on a floor robot
- I can show the difference in outcomes between two sequences that consist of the same instructions
- I can follow a sequence
- I can predict the outcome of a sequence
- I can compare my prediction to the program outcome
- I can explain the choices that I made for my mat design
- I can identify different routes around my mat
- I can test my mat to make sure that it is usable.
- I can explain what my algorithm should achieve
- I can create an algorithm to meet my goal
- I can use my algorithm to create a program
- I can test and debug each part of the program
- I can plan algorithms for different parts of a task
- I can put together the different parts of my program.

<p>Summer 2</p> <p>Link to further resources:</p> <p>Programming B <i>An introduction to quizzes</i></p> <p>Program: Scratch Jr</p>		<ul style="list-style-type: none"> • 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. • Recognise common uses of information technology beyond school. 	<ul style="list-style-type: none"> • Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. • Create and debug simple programs. • Use logical reasoning to predict the behaviour of simple programs. • Use technology safely
	Key Skills/Knowledge	Key Skills/Knowledge	Key Skills/Knowledge
		<ul style="list-style-type: none"> • I can use digital technology safely and respectfully. • I can turn an iPad on and off. • I can locate and open the Scratch Jr. app. • I can save my work. • I can plug an iPad in to charge. 	<ul style="list-style-type: none"> • I can identify the start of a sequence. • I can identify that a program needs to be started. • I can show how to run my program. • I can predict the outcome of a sequence of commands. • I can match two sequences with the same outcome. • I can change the outcome of a sequence of commands.

			<ul style="list-style-type: none"> ● I can work out the actions of a sprite in an algorithm. ● I can decide which blocks to use to meet the design. ● I can build the sequences of blocks I need. ● I can choose backgrounds for the design. ● I can choose characters for the design. ● I can create a program based on the new design. ● I can choose the images for my own design. ● I can create an algorithm. ● I can build sequences of blocks to match my design. ● I can compare my project to my design. ● I can improve my project by adding features ● I can debug my program.
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<p>GDS Opportunities</p>	<ul style="list-style-type: none"> • Children create a presentation in a small group and record the narration. • Children record sounds into software and playback. • Children insert pre recorded sounds into a presentation. • Children capture still and moving images using different features on an iPad.
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