

ICT and Computing Year Two MTP

Term	Overview	National Curriculum Objectives	Target Tracker Statements	Recommended programs/software
Autumn 1	<u>Health, Well-being and Lifestyle</u> Teaching children to become responsible users of the internet and other online technologies. Children will be able to tell you the impact that technology has on health, well-being and lifestyle including understanding negative behaviours and issues amplified and sustained by online technologies and the strategies for dealing with them.	<ul style="list-style-type: none"> Recognise common uses of information technology beyond school (DL) 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 (DL) 	<ul style="list-style-type: none"> Use technology safely and keep personal information private (E-Safety) 	<ul style="list-style-type: none"> Project Evolve > Year Two > Health, Well-being and Lifestyle
	<u>Information technology around us</u> Learners will develop their understanding of what information technology (IT) is and will begin to identify examples. They will discuss where they have seen IT in school and beyond, in settings such as shops, hospitals, and libraries. Learners will then investigate how IT improves our world, and they will learn about the importance of using IT responsibly.	<ul style="list-style-type: none"> Use technology purposefully to create, organise, store, manipulate, and retrieve digital content (IT) Recognise common uses of information technology beyond school (DL) 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 (DL) 	<ul style="list-style-type: none"> Recognise common uses of information technology beyond school (Computers) 	<ul style="list-style-type: none"> National Centre for Computing Education Year 2 Desktop PCS Microsoft PowerPoint
Autumn 2	<u>Online Relationships</u> Teaching children to become responsible users of the internet and other online technologies. Children will learn about relationships and behaviours that may lead to harm and how positive online interaction can empower and amplify voice.	<ul style="list-style-type: none"> Recognise common uses of information technology beyond school (DL) 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 	<ul style="list-style-type: none"> Use technology safely and keep personal information private (E-Safety) 	<ul style="list-style-type: none"> Project Evolve > Year Two > Online Relationships

		internet or other online technologies (DL)		
	<u>Digital photography</u> Learners will learn to recognise that different devices can be used to capture photographs and will gain experience capturing, editing and improving photos. Finally, they will use this knowledge to recognise that images they see may not be real.	<ul style="list-style-type: none"> • Use technology purposefully to create, organise, store, manipulate, and retrieve digital content (IT) 	<ul style="list-style-type: none"> • Use technology purposefully to create, organise, store, manipulate and retrieve digital content (Using Computer) • Use technology purposefully to create digital content comparing the benefits of different programs (Using Computer) 	<ul style="list-style-type: none"> • National Centre for Computing Education Year 2 • Digital camera • i-Pads
Spring 1	<u>Online Bullying</u> Teaching children to become responsible users of the internet and other online technologies. Children will learn strategies for effective reporting and intervention and how bullying and other aggressive behaviour relates to legislation.	<ul style="list-style-type: none"> • Recognise common uses of information technology beyond school (DL) • 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 (DL) 	<ul style="list-style-type: none"> • Use technology safely and keep personal information private (E-Safety) 	<ul style="list-style-type: none"> • Project Evolve > Year Two > Online Bullying
	<u>Programming – Robot Algorithms</u> This unit develops learners' understanding of instructions in sequences and the use of logical reasoning to predict outcomes. Learners will use given commands in different orders to investigate how the order affects the outcome. They will also learn about design in programming. They will develop artwork and test it for use in a program. They will design algorithms and then test those algorithms as programs and debug them.	<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 (CS) • Create and debug simple programs (CS) • Use logical reasoning to predict the behaviour of simple programs (CS) 	<ul style="list-style-type: none"> • Use of logical reasoning to predict the behaviour of simple programs (Coding) • Create simple programs (Coding) • Create and debug simple programs (Coding) • Debug simple programs by using logical reasoning to predict the actions instructed by the code (Coding) • Understand that programs execute by following precise and unambiguous instructions (Coding) 	<ul style="list-style-type: none"> • National Centre for Computing Education Year 2 • Discovery Education • Bee-bots • Purple Mash 2Go

Spring 2	<u>Self-image and Identity</u> Teaching children to become responsible users of the internet and other online technologies. Children will recognise that there may be people online who could make someone feel sad, embarrassed or upset. If this was to happen, children will know when and how to speak to an adult that they trust and how they can help. Shaping online identities and how media impacts on gender and stereotypes.	<ul style="list-style-type: none"> Recognise common uses of information technology beyond school (DL) 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 (DL) 	<ul style="list-style-type: none"> Use technology safely and keep personal information private (E-Safety) 	<ul style="list-style-type: none"> Project Evolve > Year Two > Self-image and identity
	<u>Programming buttons and instructions</u> Children can relate this learning to by looking around their home and identifying how many electronic devices they can find that have buttons on them. Learners will identify that buttons are another type of computer input that they can use in their code. They will learn that buttons are objects that can be used to control another object. These buttons will be clicked on, so they will be using a 'click event' to execute the code. Learners will use the terminology object, action, button and input.	<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 (CS) Create and debug simple programs (CS) Use logical reasoning to predict the behaviour of simple programs (CS) 	<ul style="list-style-type: none"> Use of logical reasoning to predict the behaviour of simple programs (Coding) Create simple programs (Coding) Create and debug simple programs (Coding) Debug simple programs by using logical reasoning to predict the actions instructed by the code (Coding) Understand that programs execute by following precise and unambiguous instructions (Coding) 	<ul style="list-style-type: none"> Discovery Education – Level 2 (Buttons and Instructions) Purple Mash 2Code
Summer 1	<u>Managing Online Information</u> Teaching children to become responsible users of the internet and other online technologies. Children will learn strategies for effective searching, critical evaluation and ethical publishing.	<ul style="list-style-type: none"> Recognise common uses of information technology beyond school (DL) 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 (DL) 	<ul style="list-style-type: none"> Use technology safely and keep personal information private (E-Safety) 	<ul style="list-style-type: none"> Project Evolve > Year Two > Managing Online Information
	<u>Making Music</u> In this unit, learners will be using a computer to create music. They will listen to	<ul style="list-style-type: none"> Use technology purposefully to create, organise, store, 	<ul style="list-style-type: none"> Use technology purposefully to create, organise, store and 	<ul style="list-style-type: none"> National Centre for Computing Education Year 2

	a variety of pieces of music and consider how music can make them think and feel. Learners will compare creating music digitally and non-digitally. Learners will look at patterns and purposefully create music.	manipulate, and retrieve digital content (IT)	manipulate and retrieve digital content (Using Computer) <ul style="list-style-type: none"> Use technology purposefully to create digital content comparing the benefits of different programs (Using Computer) 	<ul style="list-style-type: none"> Chrome Music Lab Purple Mash 2Explore Purple Mash 2Beat
Summer 2	<u>Privacy and Security</u> Teaching children to become responsible users of the internet and other online technologies. Behavioural and technical strategies to limit impact on privacy and protect data and systems against compromise.	<ul style="list-style-type: none"> Recognise common uses of information technology beyond school (DL) 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 (DL) 	<ul style="list-style-type: none"> Use technology safely and keep personal information private (E-Safety) 	<ul style="list-style-type: none"> Project Evolve > Year Two > Privacy and Security
	<u>Pictograms</u> Learners will begin to understand what the term data means and how data can be collected in the form of a tally chart. They will learn the term 'attribute' and use this to help them organise data. They will then progress onto presenting data in the form of pictograms and finally block diagrams. Learners will use the data presented to answer questions.	<ul style="list-style-type: none"> Use technology purposefully to create, organise, store, manipulate, and retrieve digital content (IT) 	<ul style="list-style-type: none"> Use technology purposefully to create, organise, store and manipulate and retrieve digital content (Using Computer) Use technology purposefully to create digital content comparing the benefits of different programs (Using Computer) 	<ul style="list-style-type: none"> National Centre for Computing Education Year 2 Purple Mash 2Count https://www.j2e.com/jit5#pictogram