

ICT and Computing Year One 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"> • 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"> • Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies (E-Safety) 	<ul style="list-style-type: none"> • Project Evolve > Year One > Health, Well-being and Lifestyle • Discovery Espresso KS1 Channel
	<u>Technology around us</u> Recognising technology in school and using it responsibly. Children will develop their understanding of technology and how it can help them in their everyday lives. They will start to become familiar with the different components of a computer by developing their keyboard and mouse skills. Learners will also consider how to use technology responsibly.	<ul style="list-style-type: none"> • Recognise common uses of information technology beyond school (DL) • Use technology purposefully to create, organise, store, manipulate, and retrieve digital content (IT) • 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 (Using Computer) 	<ul style="list-style-type: none"> • National Centre for Computing Education Year 1 Computing Systems and Networks • Desktop PCs
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"> • 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"> • Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies (E-Safety) 	<ul style="list-style-type: none"> • Project Evolve > Year One > Online Relationships

	<p><u>Digital painting</u></p> <p>Learners will develop their understanding of a range of tools used for digital painting. They then use these tools to create their own digital paintings, while gaining inspiration from a range of artists' work. The unit concludes with learners considering their preferences when painting with and without the use of digital devices.</p>	<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"> • Recognise common uses of information technology in the home and school environment (Computers) • Use technology purposefully to create digital content (Using Computer) • Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies (E-Safety) 	<ul style="list-style-type: none"> • National Centre for Computing Education Year 1 • Desktop PCs • Purple Mash 2Paint • Purple Mash 2Paintapicture
Spring 1	<p><u>Online Bullying</u></p> <p>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.</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 (DL) 	<ul style="list-style-type: none"> • Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies (E-Safety) 	<ul style="list-style-type: none"> • Project Evolve > Year One > Online Bullying • Discovery Espresso KS1 Channel
	<p><u>Moving a robot</u></p> <p>This unit introduces children to early programming concepts. Children will explore using individual commands, both with other children and as part of a computer program. They will identify what each floor robot command does and use that knowledge to start predicting the outcome of programs. The unit is paced to ensure time is spent on all aspects of programming and builds knowledge in a structured manner. Children are also introduced to the early stages of program design through the introduction of algorithms and begin to understand this terminology.</p>	<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) • Recognise common uses of information technology beyond school (DL) 	<ul style="list-style-type: none"> • Predict the behaviour of simple programs (Coding) • Understand what algorithms are and how they are implemented on digital devices (Coding) 	<ul style="list-style-type: none"> • National Centre for Computing Education Year 1 Moving a robot • Bee-bots

Spring 2	<p><u>Self-image and Identity</u></p> <p>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.</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 (DL) 	<ul style="list-style-type: none"> • Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies (E-Safety) 	<ul style="list-style-type: none"> • Project Evolve > Year One > Self-Image and Identity • Discovery Espresso KS1 Channel
	<p><u>Programming animations</u></p> <p>Children will learn that programs execute by following clear instructions. They will understand that programs respond to input to do different things. Children will begin to combine start and input events to create more advanced apps and programs using precise instructions whilst predicting the behaviour of these simple programs. They will continue to understand what algorithms are.</p>	<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) • Recognise common uses of information technology beyond school (DL) 	<ul style="list-style-type: none"> • Predict the behaviour of simple programs (Coding) • Understand what algorithms are and how they are implemented on digital devices (Coding) 	<ul style="list-style-type: none"> • Desktop PCs • Discovery Education Coding Level 1 <ol style="list-style-type: none"> 1. On the move 2. Simple inputs
Summer 1	<p><u>Managing Online Information</u></p> <p>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.</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 (DL) 	<ul style="list-style-type: none"> • Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies (E-Safety) 	<ul style="list-style-type: none"> • Project Evolve > Year One > Managing Online Information • Discovery Espresso KS1 Channel

	<p><u>Digital writing</u></p> <p>Children will develop their understanding of the various aspects of using a computer to create and manipulate text. They will become more familiar with using a keyboard and mouse to enter and remove text. Children will also consider how to change the look of their text, and will be able to justify their reasoning in making these changes. Finally, children will consider the differences between using a computer to create text, and writing text on paper. They will be able to explain which method they prefer and explain their reasoning for choosing this.</p>	<ul style="list-style-type: none"> • Use technology purposefully to create, organise, store, manipulate, and retrieve digital content (IT) • Use technology safely and respectfully, keeping personal information private (DL) 	<ul style="list-style-type: none"> • Use technology purposefully to create digital content (Using Computer) • Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies (E-Safety) 	<ul style="list-style-type: none"> • National Centre for Computing Education Year 1 • Desktop PCs • Microsoft Word • Purple Mash 2Publish
Summer 2	<p><u>Privacy and Security</u></p> <p>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.</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 (DL) 	<ul style="list-style-type: none"> • Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies (E-Safety) 	<ul style="list-style-type: none"> • Project Evolve > Year One > Privacy and Security • Discovery Espresso KS1 Channel
	<p><u>Grouping data</u></p> <p>Children will be introduced to data and information. They will begin by using labels to put objects into groups, and labelling these groups. Children will demonstrate that they can count a small number of objects, before and after the objects are grouped. They will then begin to demonstrate their ability to sort objects into different groups, based on the properties they choose. Finally, children will use their ability to sort objects into different groups to answer questions about data.</p>	<ul style="list-style-type: none"> • Use technology purposefully to create, organise, store, manipulate, and retrieve digital content (IT) • Use technology safely and respectfully (DL) 	<ul style="list-style-type: none"> • Use technology purposefully to create digital content (Using Computer) 	<ul style="list-style-type: none"> • National Centre for Computing Education Year 1 Grouping Data • Desktop PCs • Purple Mash – 2 Investigate