

MUNDFORD - Computing LTP – Teach Computing – September 2024

Long Term Planning grids show the learning that will be taking place throughout the year and demonstrate the clear learning paths that pupils will follow. In Computing, these paths are split into four main strands: Computational Thinking and Programming; Data and Desktop Publishing; Creating Media and Computing Systems and Networks.

Computer Science	Digital Literacy & Information Technology		
Computational Thinking & Programming	Data and Desktop Publishing	Creating Media	Computing Systems and Networks

Year	Autumn	Spring	Summer
Online Safety	Self-Image & Identity Online Relationships	Online Reputation Online Bullying	Managing Online Information Privacy & Security
Computing	Autumn	Spring	Summer
Nursery	<p>Understanding the World</p> <ul style="list-style-type: none"> Explore how things work. Show an interest in technological toys with knobs or pulleys. <p>Children might:</p> <ul style="list-style-type: none"> Use sound button books Explore sensory toys and toys with buttons Play simple games on the ipad/smartboard that involve tapping the screen 	<p>Understanding the World</p> <ul style="list-style-type: none"> Show an interest in technological toys with real objects such as cameras and touchscreen devices such as tablets. <p>Children might:</p> <ul style="list-style-type: none"> Take photos of their own achievements on the iPads Use a listening station – turning it on, pressing play and stop. 	<p>Understanding the World</p> <ul style="list-style-type: none"> Know how to operate simple equipment, e.g. turn on CD player, use a remote control, can navigate touch-capable technology with support. <p>Children might:</p> <ul style="list-style-type: none"> Use the smartboard to engage in touch screen activities. Tinker with Bee-bots Use the listening station – turning it on, pressing play, stop or pause, selecting a song, changing the volume.
Reception *select most suitable	<ul style="list-style-type: none"> Barefoot – Awesome Autumn OR Busy Bodies* Barefoot – Winter Warmers OR Boats Ahoy* 	<ul style="list-style-type: none"> Barefoot – People Who Help Us (Beebots) Barefoot – Springtime 	<ul style="list-style-type: none"> Barefoot – Super Space Barefoot – Summer Fun Introduce keyboard and mouse on Chromebooks

	<i>Literacy Tree: Outside Inside / Knowing Yourself</i>		<i>Literacy Tree: Talents & Powers / Sewing a Seed</i>		<i>Literacy Tree: Celebrating Self / Family & Friends</i>	
Year 1		Computing Systems & Networks: Technology Around Us	Information Technology (Creating media): Digital Writing		Programming A: Moving a Robot (Beebot)	Optional: Programming B: Animations (Scratch Junior)
	<i>Literacy Tree: Journeys & exploration / Heroes & Villains</i>		<i>Literacy Tree: Similarities and differences / Nature & Environment</i>		<i>Literacy Tree: Friendship & Kindness / Imagination & Creativity</i>	
Year 2		Computing Systems & Networks: IT around us	Information Technology (creating media): Digital Music	Data & Information: Pictograms	Programming A: Robot Algorithms (Beebot)	Optional Programming B: Quizzes (Scratch Junior)
	<i>Literacy Tree: A twist in the tale / Creation & conservation</i>		<i>Literacy Tree: Bravery vs fear / Change & Relationships</i>		<i>Literacy Tree: Fictional World & Fantasy / Urban Metropolis</i>	
Year 3	Computing Systems & Networks: connecting computers	Programming A: Sequencing sounds	Data and information: Branching databases		Information Technology (creating media): Desktop Publishing	Optional: Programming B: Events and Actions in programs
	<i>Literacy Tree: Magic & wonder / Dreams & curiosity</i>		<i>Literacy Tree: Hope & Healing / Overcoming adversity</i>		<i>Literacy Tree: From mystery to discovery / confidence & caution</i>	
Year 4	Computing Systems & Networks: The Internet	Programming A: Repetition in shapes	Data & Information: Data Logging (Data Loggers or Micro:bits)		Information Technology (Creating Media): Photo Editing	Optional: Programming Micro:bit: Repetition (Do Your :bit – Volcano animations)
	<i>Literacy Tree: Finding Freedom / Invention & innovation</i>		<i>Literacy Tree: Darkness & light / Taking courage</i>		<i>Literacy Tree: Unearthing civilisations / A window into the world</i>	
Year 5	Computing Systems & Networks: Systems and Searching	Programming A: selection in physical computing (Crumble)	Data & Information: Flat File Databases		Information Technology (Creating Media): Introduction to vector graphics	Optional: Programming B: Selection in Quizzes
	<i>Literacy Tree: Ambition & desire / Power vs principles</i>		<i>Literacy Tree: Belonging & equality / Legends & folklore</i>		<i>Literacy Tree: Lessons from history / Mystery & truth</i>	
Year 6	Computing Systems & Networks:	Programming A: Variables in games	Data & Information: Introduction to spreadsheets	Information Technology		Optional: Programming B:

	Communication and Collaboration			(Creating Media): Web page creation		Sensing Movement (Micro:bits)
	<i>Literacy Tree: Migration & movement / Evolution & inheritance</i>		<i>Literacy Tree: Enterprise & activism / Utopia vs dystopia</i>		<i>Literacy Tree: Fate vs free will / Crossing borders</i>	

Desirable Functional IT Skills

Key stage 1

- Logging on/off to a device
- Logging on/off software/app accounts
- Opening/closing programs/tabs/apps
- How to start a new file
- How to open a previously saved file
- How to open a shared file
- Mouse control hand eye co-ordination
- Mouse clicks left/right button left click, single click to select, click and drag, double click to launch
- Touchscreen skills e.g. hold a picture to save, swipe, single and double tap
- Keyboard skills for capital letters and simple punctuation. Keyboard layout: letters, numbers,
- backspace, delete and return/enter key
- Accessing/hiding onscreen keyboards
- Take photographs on digital devices and upload
- How to add text
- How to add an image
- How to add a sound

Key Stage 2

- Cut/copy and paste with a mouse
- Keyboard short cuts ctrl+V, ctrl+C and ctrl+X
- Touchscreen skills e.g. hold a picture to save, swipe, single and double tap
- Mouse right click to access additional functions
- Typing Skills – two hands, multiple fingers, use of both shift keys
- Viewing open windows: minimise, maximise, close, dual screen view and navigate between multiple tabs, windows and applications
- Make folders for file management, add and move files, copy and rename files to add to folders Understand the difference between Save, AutoSave and Save As
- Add attachments and send to others
- Share files with others for accessing, collaborating and marking
- Know how to collaborate on a document online e.g. wiki
- Know how to communicate online e.g. email, online forums, message boards, direct messaging, video calling and social media
- Understand how to use privacy tools when communicating online
- Upload files from external device
- Understanding where work is saved e.g. hard drive/cloud/shared network
- Use search to locate and open files
- Take, save and use screenshots
- Highlighting copy/cut and paste, alignment and Tab key
- Print work
- Use advanced search engine tools to find web sites and images e.g. searching for copyright free content or transparent images and cite references
- Highlighting and formatting text and images