



Information Technology
Computer Science
Digital Literacy including Online Safety

Year 1	Introduction to Purple Mash (3 lessons) - Logging in and out of PM - Opening and Using 2Dos - Saving Work in the Work Area	Creative Computing (4 weeks) - Making digital art - Making and sharing jigsaws - Making a drag and drop game	Data Explorers (6 weeks) - Sorting and grouping quizzes - Understanding what data is - Representing data electronically	Creating and Following Instructions (3 weeks) - Following instructions - Creating instructions - Understanding simple algorithms	Animated Stories (6 weeks) - Creating digital art and text - Adding animation to images - Adding sound	Coding (6 weeks) - Using blocks to code - Understanding objects, actions and events - Planning and designing a program	Technology Around Us (4 weeks) - Understanding what technology is - Recognising technology in the local environment and wider world	Making Beats (4 weeks) - Creating sounds using 2Explore - Combining instruments using 2Beat - Composing digital music
Year 1 2BeSafe	Self-Image and Identity Feeling sad, embarrassed or upset online Trusted adults for support	Online Relationships Permission Adult support Respect Feelings online	Online Reputation Online information Trusted adults	Online Bullying Online behaviour	Managing Online Information Information using digital technologies, e.g. search engines, voice activated searching). Likes/dislikes Real/make believe Getting help from a trusted adult	Health, Well-being and Lifestyle Rules online	Privacy and Security Passwords. Personal information Permission	Copyright and Ownership Technology belonging to me. Saving under a suitable title / name Work created by others
Year 2	Route Explorers (4 weeks) - Considering direction and distance - Creating commands - Building an algorithm	The Internet (4 weeks) - Defining the World Wide Web - Recognising browsers and websites - Connecting to the internet	Creating Pictures (5 weeks) - Using 2Paint and a Picture templates - Exploring the features of each template - Compiling an online art portfolio - Comparing digital art effects to non digital effects	Spreadsheets (6 weeks) - Understanding cells and columns - Inserting images with values - Using totalling tools - Creating graphs	Questioning (4 weeks) - Asking the right question to collect or present data - Keeping a tally - Using 2Count to present the data - Using a branching database	Coding (6 weeks) - Understanding algorithms - Introducing sequencing - Coding interaction between objects - Using timers - Debugging	Presenting Ideas (4 weeks) - Using and making mind maps - Using a mind map as a presentation tool	Making Music (3 weeks) - Understanding a digital music tool - Relating the music to functional terms - Composing music digitally
Year 2 2BeSafe	Self-Image and Identity Images online and offline. Issues online Feeling sad, worried, uncomfortable	Online Relationships Communicating through technology Risky behaviour Personal information	Online Reputation Online information Consent Support	Online Bullying Bullying Feelings Support	Managing Online Information Search engines. Navigating Voice activated searching	Health, Well-being and Lifestyle Guidance for using technology in different environments and settings Rules / guides for support	Privacy and Security Passwords and protection Private information Rules	Copyright and Ownership Content and belonging

	Support	Permission and consent Pressure Support			Imaginary information, 'made up' or 'make believe' and things that are 'true' or 'real.'		Devices connected to the internet	
Year 3	Email (6 weeks) - Composing and replying to emails - Opening and sending attachments - Using email safely	Route Planners (5 weeks) - Writing commands using rotation - Creating algorithms and writing code - Planning routes - Repetition in 2Go	Branching Databases (4 weeks) - Asking binary questions - Completing branching databases in 2Question - Creating and testing branching databases	Spreadsheets (6 weeks) - Creating graphs - Understanding cell addresses - Using the formula bar - Combining 2Calculate functions to analyse data	Coding (6 weeks) - Using flowcharts in 2Chart - Using timers - Introducing repetition - Testing and debugging	Presentations (5 weeks) - Adding media - Customising with animation and timings - Designing and effective presentation	Touch Typing (4 weeks) - Recognising keyboard locations - Understanding correct finger positioning - Improving accuracy and speed	
Year 3 2BeSafe	Self-Image and Identity Identity Representing online. Identity	Online Relationships Likes and interests Online and offline relationships Trusting online/offline Feeling nervous, uncomfortable or worried Protecting feelings. Giving and gaining permission	Online Reputation Searching for information about others online Personal information	Online Bullying Behaviour online Bullying behaviour Support.	Managing Online Information Search engines Autocompletion Selling and buying online Difference between a 'belief', an 'opinion' and a 'fact' Opinions online Support from a trusted adult	Health, Well-being and Lifestyle Too much time using technology and negative impact Age restrictions Pressure	Privacy and Security Strategies for creating and keeping passwords private. Trust Pressure Collected and shared nformation	Copyright and Ownership Copying work Permission Fair/unfair Consequences
Year 4	Unpacking Hardware and Software (4 weeks) - Defining types of technology - Knowing how systems work together - Identifying hardware - Understanding software	Animation (6 weeks) - Knowing the types of animation - Understanding onion skinning - Exploring animation features - Using storyboarding	Logo (4 weeks) - Using Logo commands - Writing commands in sequence - Refining code using repetition and procedures	Sound Stories (4 weeks) - Recording audio content - Creating sound effects - Post-production editing	Effective Searching (4 weeks) - Using a search engine - Search rankings - Reliable searching - Search algorithms	Coding (6 weeks) - Introducing selection - Exploring design and properties - Introducing loops - Coding number variables	Composing Beats (4 weeks) - Exploring pulse, rhythm and tempo - Understanding pitch and texture - Composing a melody	Introduction to AI (4 weeks) - Exploring how AI works - Investigating the positive and negative impacts of AI - Considering AI in the future
Year 4 2BeSafe	Self-Image and Identity Identity online/offline Positive/negative interaction False pretence	Online Relationships Strategies for safe and fun experiences Respect online Healthy and unhealthy online behaviours. Sharing content online.	Online Reputation Searching online Created, copied or shared information	Online Bullying Feelings online Ways people can be bullied through a range of media Content posted and reputation	Managing Online Information Judgements Decisions Searching for information and accuracy	Health, Well-being and Lifestyle Using technology as a distraction from other things, in both a positive and negative way Limiting time on technology and strategies	Privacy and Security Strategies for keeping personal information private Trust in the internet Supervision	Copyright and Ownership Searching on the internet Ownership Permission f

					Buying things online and problems Sharing opinions or beliefs online True/untrue Impersonation of living things (e.g. bots) Benefits and risks Fake news/pretending something is true when it isn't		Online services and consent to store information Responding appropriately Digital age of consent and the impact this has on online services asking for consent	
Year 5	Quizzing (5 weeks) - Evaluating the features of a good quiz - Choosing appropriate question types - Making use of feedback and titles - Testing and editing quizzes	Databases (4 weeks) - Understanding records and fields - Creating a collaborative database - Searching databases - Analysing data	Game Creator (5 weeks) - Exploring the features of a good game - Designing and making sprites and the game world - Evaluating the playability of games	Spreadsheets (6 weeks) - Using formulae - Exploring measurement conversions - Carrying out numerical investigations - Creating computational models	Coding (6 weeks) - Coding efficiently by refining code - Simulating a physical system - Exploring decomposition and abstraction - Using functions and variables	Word Processing (6 weeks) - Creating documents - Using images - Entering and editing text - Using tables and contents		Concept Maps (4 weeks) - Creating concept maps - Presenting from a concept map - Making collaborative concept maps
Year 5 2BeSafe	Self-Image and Identity Copying, modifying or altering Choices online	Online Relationships Forms of communication using technology Risks and harm Online communities Support and trusted adults.	Online Reputation Information about others Judgements and false information	Online Bullying Online bullying Negative impact of playful joking and teasing (including 'banter') Help and support Trusted adults Reporting concerns Blocking abusive users Helpline services	Managing Online Information Benefits and limitations of using different types of search technologies Being sceptical Evaluating digital content Choices Information, reviews, fact, opinion, belief, validity, reliability and evidence Information for different agendas, e.g. website notifications, pop-ups, targeted ads Commercially sponsored information	Health, Well-being and Lifestyle Ways technology can affect health and well-being both positively (e.g. mindfulness apps) and negatively. Strategies, tips or advice to promote health and well-being with regards to technology Benefits and risks of accessing information about health and well-being online Creating balance Trusted adults and professionals Apps/games and payment	Privacy and Security Strong passwords Free apps/services and personal information App permissions	Copyright and Ownership Using the work of others. Permission

					Stereotypes and influence Negative impact of fake news Hoaxes	Permission from a trusted adult before purchasing		
Year 6	Networks (4 weeks) - Identifying examples of networks - Recognising types of networks - Understanding internet services - Discussing positive and negative use of networks	Graphing (4 weeks) - Creating a range of graph types - Incorporating multiple datasets - Using graphs to solve a problem - Exporting and importing files	Blogging (4 weeks) - Planning the theme, content and structure - Writing, editing and publishing s blog - Understanding blog moderation - Reviewing and commenting on blog posts	Data Detectives (4 weeks) - Filtering and sorting data - Grouping data - Linking tables	Coding (6 weeks) - Using functions - Understanding flowcharts and control simulations - Coding for user input	Introduction to Python (4 weeks) - Comparing block and text code views - Coding for text output - Working with different datatypes - Coding repetition in Python	Spreadsheets (6 weeks) - Performing calculations - Entering and using formulae - Presenting data - Solving real life problems	3D Modelling (4 weeks) - Working with viewpoints of 3D objects - Adding and editing points on a model - Designing for a purpose
Year 6 2BeSafe	Self-Image and Identity Online content relating to gender, race, religion, disability, culture and other groups Challenging and rejecting Issues online Feeling sad, worried, uncomfortable or frightened Support	Online Relationships Impacts of sharing something online Being kind and showing respect for others online Respecting boundaries Taking or sharing inappropriate images of someone and the impact for the sharer and others Support	Online Reputation Positive online reputation Strategies to protect digital personality	Online Bullying Capturing bullying content as evidence Reporting online bullying in different contexts	Managing Online Information Search engines and they are selected and ranked Using search technologies effectively Opinions versus facts Influence, manipulation and persuasion Persuasive design Validity of 'facts' Online misinformation and dis-information Inaccurate or untrue information Identifying, flagging and reporting inappropriate content	Health, Well-being and Lifestyle Common systems that regulate age-related content Pressures that technology can place on someone Features of persuasive design Strategies to limit the impact of technology on health	Privacy and Security Managing passwords Seeking help/support Keeping software and apps up to date Increasing privacy on apps and services Becoming a target Strategies Terms and conditions	Copyright and Ownership Search tools to find and access online content Making references to and acknowledging sources

Respect

Perseverance

Joy

Forgiveness

Kindness

Love