



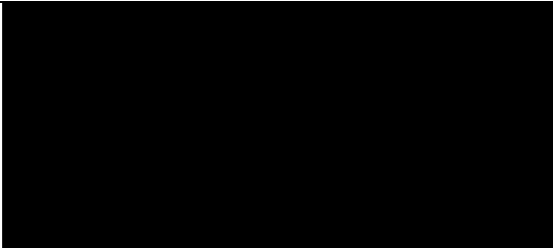
Overview of Computing Progression

		EYFS (introducing NC)		KS1			KS2		
Area	F1	F2	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
Online Safety	Online Reputation	<ul style="list-style-type: none"> Knowing my friends and family 	<ul style="list-style-type: none"> Knowing I can share things online 	<ul style="list-style-type: none"> Everything online is permanent Information can be shared/copied 	<ul style="list-style-type: none"> Posts about friends/family can be there permanently and may be viewed by strangers Asking permission before posting things online 	<ul style="list-style-type: none"> Using search engines effectively Refining results Respecting others when posting their information 	<ul style="list-style-type: none"> People using the internet to find information about me People altering information about me to make it untrue or inaccurate 	<ul style="list-style-type: none"> Not all information about people is accurate Making judgements on information we find about people 	<ul style="list-style-type: none"> Judgements made by people when they search for us online Digital personality Protecting anonymity / reputation
	Copyright and Ownership	<ul style="list-style-type: none"> The things I make are mine 	<ul style="list-style-type: none"> Putting name on things I have made 	<ul style="list-style-type: none"> The owner is the person who created it Putting your name on the work can copyright it 	<ul style="list-style-type: none"> Content on the internet sometimes belongs to other people Learning that shared content does not necessarily mean the sharer is the owner 	<ul style="list-style-type: none"> Rights over our own content Should not take credit for someone else's work Not everything online is available for us to use 	<ul style="list-style-type: none"> Keeping the owner in mind when using their content Illegal online content – streaming services etc. 	<ul style="list-style-type: none"> Assess and justify the appropriateness of using another person's work Copyrighted work 	<ul style="list-style-type: none"> Reusable content Referencing online sources
	Self-Image & Identity	<ul style="list-style-type: none"> What makes me unique? 	<ul style="list-style-type: none"> Identifying likes and dislikes that make up my identity 	<ul style="list-style-type: none"> People may deliberately be unkind online Speaking to a trusted adult when they are upset 	<ul style="list-style-type: none"> Children to learn how to make themselves look different online Children to learn why we make ourselves look different 	<ul style="list-style-type: none"> Identity – how people represent themselves online Why might people have a different online identity to their real-life identity 	<ul style="list-style-type: none"> Online identities –how people can make them effective Impersonation – impersonating someone online 	<ul style="list-style-type: none"> Identity – way you speak/type etc. Positive and negative impact on others (catfishing) Multiple Online Identities 	<ul style="list-style-type: none"> Representations of others in the media Combatting negative stereotypes / representations
	Managing Online Information	<ul style="list-style-type: none"> Computers are used to help and entertain us 	<ul style="list-style-type: none"> Uses of a computer 	<ul style="list-style-type: none"> Internet can be used to find things – harmful and upsetting at times Internet can be accessed by Google/Alexa 	<ul style="list-style-type: none"> Navigating a website (back/tabs etc) Learning that not everything is true 	<ul style="list-style-type: none"> Using keywords to find things faster Internet used to sell/buy Not all opinions are true 	<ul style="list-style-type: none"> Making judgement about the accuracy of online content Fake news (and how it can affect people) 	<ul style="list-style-type: none"> Validity and trustworthiness of websites and services Online stereotypes and hoaxes 	<ul style="list-style-type: none"> Influence, manipulation & persuasion Persuasive design Reporting inappropriate content
	Health, Wellbeing & Lifestyle	<ul style="list-style-type: none"> Doing things that make me happy 	<ul style="list-style-type: none"> Unplugged – things I can do outside of technology 	<ul style="list-style-type: none"> Healthy Balance – unplugged SMART rules to keep healthy and happy 	<ul style="list-style-type: none"> Children to learn about side effects of too much technology Technology rules differ depending on the environment 	<ul style="list-style-type: none"> PEGI ratings Using the internet positively and safely so it does not cause us harm 	<ul style="list-style-type: none"> Distraction can prevent a healthy lifestyle Using own judgement – is technology always the best solution? 	<ul style="list-style-type: none"> Sleep Reducing the chances of technology ruining a healthy sleeping pattern 	<ul style="list-style-type: none"> Age restricted content Persuasive design to keep people interested
	Privacy & Security	<ul style="list-style-type: none"> Keeping my own information safe 	<ul style="list-style-type: none"> Knowing what a password is 	<ul style="list-style-type: none"> What is the purpose of passwords? Keeping passwords safe 	<ul style="list-style-type: none"> Learning about public sharing vs private sharing Password leaks Protecting information 	<ul style="list-style-type: none"> Passwords – where to store, how to create, password rules etc. Sharing information with trusted people only 	<ul style="list-style-type: none"> Internet is monitored for safety Age of consent 	<ul style="list-style-type: none"> Apps read and share information App permissions allow developers to collect data 	<ul style="list-style-type: none"> Genuine and fake content Scamming Multiple ways to report/block

	 Online Bullying	<ul style="list-style-type: none"> • People being unkind 	<ul style="list-style-type: none"> • Showing kindness to other people 	<ul style="list-style-type: none"> • Bullying is several times on purpose • People use the internet for different reasons – we should always be kind 	<ul style="list-style-type: none"> • Victim is not to blame (and it can make the victim very sad) • Trusted adult when worried about something 	<ul style="list-style-type: none"> • Online behaviours can make people have different online experiences • Forms of bullying (hurtful comments, exposing etc) 	<ul style="list-style-type: none"> • Inferring feelings from the way someone is acting • Bullies making or using screenshots/videos etc • Proofreading messages 	<ul style="list-style-type: none"> • Bullying vs playful joking • Blocking abusive users 	<ul style="list-style-type: none"> • Collating evidence (screenshots) • Everlasting impact • Reporting content
	Online Relationships	<ul style="list-style-type: none"> • Different types of friends (home/school) 	<ul style="list-style-type: none"> • Communicating with different people in different settings 	<ul style="list-style-type: none"> • Internet can be used to communicate with family & friends (Facetime, Messenger) • Online friends aren't always real friends 	<ul style="list-style-type: none"> • Strangers on the internet • Consent (giving and respecting others) • Dealing with when others try to pressure us 	<ul style="list-style-type: none"> • Finding friends with similar interests • Online friend vs real friend • Withdrawing consent 	<ul style="list-style-type: none"> • Platforms for different purposes • Boundaries • Respecting content as it means a lot to the sharer 	<ul style="list-style-type: none"> • Different forms of communication (Gifs/images) • Online collaborations 	<ul style="list-style-type: none"> • Sharing embarrassing images of others • Content shared privately can still be exposed
Information Technology / Digital Literacy	Word Processing	<ul style="list-style-type: none"> • Introducing a keyboard and mouse 	<ul style="list-style-type: none"> • Logging in and accessing devices 	GOOGLE DOCUMENTS <ul style="list-style-type: none"> • Google Classroom • Saving documents • Inputting data • Keyboard • Printing • Templates 	GOOGLE DOCUMENTS <ul style="list-style-type: none"> • Copy & pasting • Formatting text (font/colour/alignment) • Inserting images and shapes 	GOOGLE DOCUMENTS <ul style="list-style-type: none"> • Adjusting margins • Inserting columns • Inserting and formatting tables • Inserting text boxes 	GOOGLE SLIDES <ul style="list-style-type: none"> • New slides • Using premade designs • Formatting background • Insert text box/shape • Inserting transitions 	GOOGLE SLIDES <ul style="list-style-type: none"> • Inserting animations • Formatting pictures / shapes 	GOOGLE SITES <ul style="list-style-type: none"> • New page • Inserting button • Inserting text/media types
	Photography & Video creation	<ul style="list-style-type: none"> • A camera takes pictures 	<ul style="list-style-type: none"> • Taking a photograph of something 	PHOTOGRAPHY <ul style="list-style-type: none"> • Holding iPad • Taking photographs • Angles of photographs • Creating picture collage 	PHOTOGRAPHY <ul style="list-style-type: none"> • Editing photographs • Cropping pictures • Adding text • Adding effects 	VIDEO <ul style="list-style-type: none"> • Recording videos • Using slo-mo • Using pano • Using time-lapse 	VIDEO <ul style="list-style-type: none"> • Assessing purpose of video • Shot types • Respectful videography 	VIDEO <ul style="list-style-type: none"> • Cropping videos • Overlapping videos • Combining videos together 	VIDEO <ul style="list-style-type: none"> • Adding images to videos • Adding text • Adding music/audio file • Exporting video
	Digital Art	<ul style="list-style-type: none"> • Someone is creative and makes art 	<ul style="list-style-type: none"> • Creating a seasonal image on iPads 	DIGITAL ART <ul style="list-style-type: none"> • Introducing pixels • Changing pixel colours • Using pixels to create something 	DIGITAL ART <ul style="list-style-type: none"> • Adding shapes • Labelling shapes with text • Altering pixels 	DIGITAL ART <ul style="list-style-type: none"> • Using shapes to fill • Copy/paste • Creating reflective symmetry 	DIGITAL ART <ul style="list-style-type: none"> • Creating layers • GIF creation 	GRAPHIC DESIGN <ul style="list-style-type: none"> • Using Google Slides to create graphic design • Using icons and shapes to overlap/bring to front etc. 	GRAPHIC DESIGN <ul style="list-style-type: none"> • Grouping and combining shapes/patterns • Manipulating transparency/gradient etc.
	Uses of IT (including VR)	<ul style="list-style-type: none"> • Computers and iPads help and entertain us 	<ul style="list-style-type: none"> • Identifying technology outside of the classroom 	USES OF IT <ul style="list-style-type: none"> • IT beyond school • Helpful technology 		VIRTUAL REALITY <ul style="list-style-type: none"> • Adding, moving and resizing objects in a VR environment 		VIRTUAL REALITY <ul style="list-style-type: none"> • Using code blocks to create movement • Creating multiple scenes 	
	Animation	<ul style="list-style-type: none"> • Cartoons are a type of animation 	<ul style="list-style-type: none"> • Identifying and using comic strips 	COMIC CREATION <ul style="list-style-type: none"> • Backgrounds (colour and picture) • Adding characters/objects • Adding speech bubbles for narrations • Resizing and organising objects/backgrounds 		ANIMATION <ul style="list-style-type: none"> • Adding a background and objects to a frame • Moving objects to create a moving animation (with objects moving simultaneously) 		ANIMATION <ul style="list-style-type: none"> • Creating stop-motion animation which includes backgrounds and shapes • Using transitions and animations (such as morph) to create animation 	

	<ul style="list-style-type: none"> • Music is made using instruments 	<ul style="list-style-type: none"> • Using instruments to create music and rhythms 		<p>MUSIC CREATION</p> <ul style="list-style-type: none"> • Using computers to create music • Grouping sounds • Adding rhythms 		<p>MUSIC CREATION</p> <ul style="list-style-type: none"> • Adding steady rhythms • Building beats/effects • Using sample sounds to create an effective music mix 	<ul style="list-style-type: none"> • Editing individual elements of an object 	<p>MUSIC CREATION</p> <ul style="list-style-type: none"> • Layering tracks and sounds • Editing tracks • Adjusting volume • Inserting effects
	<ul style="list-style-type: none"> • Some books are on iPads or computers 	<ul style="list-style-type: none"> • Using technology to read books 		<p>EBOOKS</p> <ul style="list-style-type: none"> • Adding and duplicate pages • Inserting images/audio recordings • Formatting page shape and background • Inserting hyperlinks to aid navigation 		<p>SWAY</p> <ul style="list-style-type: none"> • Creating a Sway (making horizontal/vertical) • Inserting and formatting content / headers • Adding groups to format images 		<p>CANVA</p> <ul style="list-style-type: none"> • Finding templates and editing to suit own needs • Adding content boxes • Formatting images/objects/text • Overlapping content • Exporting document to save
Computer Science	<ul style="list-style-type: none"> • Understanding why computers are networked • Understanding that computers are linked together • Difference between the internet and WWW 				<ul style="list-style-type: none"> • Servers on the internet are located across the internet • Emails sent across the internet • Collaboration on the internet 	<ul style="list-style-type: none"> • Viewing webpages on the internet • Uses search technologies effectively (including how pages are ranked in search engines) • Web spiders index the web for search engines 	<ul style="list-style-type: none"> • Understanding main parts of a data packer • Accessing shared files stored online • Comparing collaboration on the internet • Choosing suitable methods of communication to suit different needs 	
	<ul style="list-style-type: none"> • Understanding instructions (algorithms) • Using instructions in different settings • Problem solving and correcting sets of instructions 	<ul style="list-style-type: none"> • Creating a simple algorithm • Debugging simple algorithm • Understanding sequence of an algorithm • Predicting and stating an outcome of an algorithm 	<ul style="list-style-type: none"> • Write and tinker a piece of simple code • Improve an algorithm by debugging • Create code that includes movement and audio • Use logic to predict outcome of an algorithm 	<ul style="list-style-type: none"> • Develop stronger understanding of algorithms • Create own algorithms and identify own patterns • Design and evaluate own programme 	<ul style="list-style-type: none"> • Meaning of repetition of code • Correct errors in instructions, programmes or algorithms • Adapting code to ensure it is succinct 	<ul style="list-style-type: none"> • Decompose algorithms • Use selection and variables in programmes • Apply knowledge of decomposition and selection in different scenarios (part 1) 	<ul style="list-style-type: none"> • Understanding variables • Creating code for different projects • Apply knowledge of decomposition and selection in different scenarios (part 2) 	
Data	<ul style="list-style-type: none"> • Using tally charts and bar charts • Representing data using a pictogram • Sorting data and information into more than one category • Analyse data and make comparisons 		<ul style="list-style-type: none"> • Collecting own data by using tally chart/bar chart • Create a block chart • Create and analyse a range of different charts and data 	<ul style="list-style-type: none"> • Analysing a branching database • Creating a branching database 	<ul style="list-style-type: none"> • Collecting data using suitable method of representation • Create and use bar chart for variety of purposes 	<ul style="list-style-type: none"> • Questionnaires and understanding how they are used to collect data • Plan sets of questions that will generate in-depth results • Creating questionnaires and analyse data collected 	<ul style="list-style-type: none"> • Purpose of spreadsheets • Creating a formula and be able to use formulae in a range of subjects • Create a spreadsheet that is used for a range of purposes 	

Significant
Individuals



**Steve Jobs
(Apple)**

**Ada Lovelace
(Computer Programmer)**

**Bill Gates
(Microsoft)**

**Mark Zuckerberg
(Facebook)**

**Grace Hopper
(Coding)**

**Alan Turing
(Computer Scientist)**