Park Gate Primary – Computing Curriculum

The use of technology is completely embedded in our Park Gate curriculum; its use is carefully considered to enable the children to best fulfil the learning objective of the lesson. Teachers make learning opportunities relevant and purposeful, engaging children further and giving their work meaning. Imaginative teaching strategies, for example, using greenscreen technology when learning about Arizona, enables children not only to learn in exciting and inventive ways, but also develop key life skills such as communication, collaboration, problem-solving and resilience, ensuring that the children are secondary school ready. Our children develop a love for learning, enhanced by the use of technology across the curriculum, from the varied and stimulating experiences they are provided with. Not only has this had a significant positive impact on our results but more importantly, it has helped to create successful, happy learners with a thirst for knowledge, a determination to succeed and necessary skills to continue to flourish in secondary school and beyond.

Digital Literacy

Digital Literacy is the ability and skill to find, evaluate, utilise, share and create content using information technology and the Internet.

This is separated into 8 key areas:
➢ Self-Image and Identity
➢ Online Relationships
➢ Online Reputation
➢ Online Bullying
➢ Managing Online Information
➢ Health, Well Being and Lifestyle
➢ Privacy and Security
➢ Copyright and Ownership

At Park Gate Primary School, we follow a **SAFE** and **SMART** approach to being digitally literate.

Information Technology

Information Technology concerns the use of computer software to achieve a specific goal.

This should include...
➢ Word Processing
➢ Data Handling
➢ Presentations
➢ Animation
➢ Video Editing
➢ Photography and Digital Art
➢ Sound

At Park Gate Primary School this should include **MS Word**, **Excel** and **PowerPoint**, **MS Teams**, **Stop Motion** Animation, **Paint 3D**, **Do Ink Animation** and **Greenscreen** applications

Computer Science + Networking

Computer Science is the study of how to manipulate, transform and encode information using digital devices
Networking involves the linking of computers to allow them to operate interactively.

This should include...
➢ Computational Thinking
➢ Coding/Programming
➢ Computer Networks,

At Park Gate Primary School this should include **Scratch** programming, **crumble** computer control, **Bee-Bots**, **Blue Bots** and Busy Things '**Beard Man**'.

Internet Safety

S SPEAK to somebody if you need help.

A ASK an adult before going online.

F FRIENDS are real people we know.

E ENJOY Play, have fun and stay safe.

Speak to:

if you are worried about anything.

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S SHARE RESPONSIBLY
We all love to share photographs, fun things we`re doing and much more.

Be careful what you share and always ask permission if somebody else is in the photo or video.

M MANAGE your PRIVACY
If you`re using apps that can communicate with others, turn on privacy.

Only let people you really know follow you unless you`ve asked permission from your parents.

A ASK for HELP
Don`t ever be worried about asking for help from someone you trust.

You will NOT be judged.

R RESPECT OTHERS
Be kind.

Other people may have different opinions from you.

That`s okay, but if they become abusive, take screenshots, block and report and tell an adult.

T THINK CRITICALLY
TRUST your INSTINCT
Is it true?
Does that person really know me?
Has that really happened?

Always question!

If anything worries you, or if you need help with something, speak to:

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Here at Park Gate Primary School the **SAFE** and **SMART** approach to Internet Safety should underpin all areas of digital literacy.

In **Reception** children should be able to **identify trusted adults** that they can talk to should they feel worried about any aspect digital literacy. The children should always be encouraged to **tell trusted adults** about the content they are viewing using any digital device before they begin using them. Our pupils will understand that digital devices allow us to **view, share and contribute content to the internet** and that they should online interact with trusted people which they have **met in person**. Children should be encouraged to **enjoy using digital devices** whilst following the SAFE approach to internet safety.

In **Key Stage 1** our children will discuss the continued use of the **SAFE** approach to E-Safety through discussing issues such as **online bullying** and how our **online relationships** should emulate our real-life relationships. We learn that some information is **private** and should not be shared with others in person or online. The children begin to understand how all aspects of E-safety can affect our lives including our **health, well-being and lifestyle**.

In **Key Stage 2** the children will begin to follow the advanced **SMART** approach. This will include: learning about **self-image and identity**; managing their own **online information** and the **online reputation** they build for themselves; and personal privacy when using social media. Further to this, the children in Key Stage 2 will discuss **copyright and content ownership issues** and how all of the different aspects of E-safety can affect our lives including our **health, well-being and lifestyle**.

Park Gate Primary Long-Term Overview

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
R	Copyright and Ownership	Health, Wellbeing and Lifestyle	Online Relationships/ Online Bullying Keeping Myself Safe (PDL)	Self-image and Identity Online Reputation	Managing Online Information	Privacy and Security
	Year R follow a child-initiated curriculum which offers a variety of opportunities to incorporate computing skills. Our children will learn: to use iPads to record video and make their own shows; to use painting tools to create masterpieces; to programme simple instructions into BeeBots; or to explore real-life computing through role-play.					
1	Introduce SAFE Privacy and Security	Online Bullying	Online Relationships including Keeping Myself Safe (PDL)	Managing Online Information	Self-image and Identity Online Reputation	Copyright and Ownership Health, Wellbeing and Lifestyle
	Introducing computers. Mouse and basic keyboard skills.	BlueBots programming introducing algorithms using Tactile Reader.	Keyword skills Logging onto school network	Digital or traditional art investigation – paint tools and skills (Great Fire of London painting).	Photography and research skills using QR codes. Beard Man programming	Data Handling – graphing/branching software.
2	Re-introduce SAFE Privacy and Security Copyright and Ownership	Online Relationships/ Online Bullying	Self-image and Identity	Managing Online Information	Health, Wellbeing and Lifestyle	Online Reputation
	Word processing and digital art – developing tools and skills.	'Blue Bots' apply Year 1 learning and investigate algorithms.	Scratch Junior Coding	Word processing – creating a poster on the weather. Inserting photos and editing text.	Teach presentation skills – adding text and photographs during New Zealand research	Using Programmes to display information – (Busy Things food pictograms) through ready, steady, shop project.
3	SMART – moving on from SAFE Privacy and Security	Managing Online Information Copyright and Ownership	Online Relationships including Keeping Myself Safe (PDL)	Self-image and Identity Online Reputation	Online Bullying	Health, Wellbeing and Lifestyle
	Scratch Junior Coding	Microbit	Microbit Scratch Programming	Scratch Programming –talking, colour changing sprites	'Boogie Bot'	'Boogie Bot'
	Data handling – Use bar charts in busy things to present data in This is me project. Word skills covered throughout the year along with saving/loading onto the network Busy Things (3 weeks)	Research skills – Google Classroom (2 weeks) Excel Spreadsheet Lake District Temperatures across a year (2 weeks)	PowerPoint Presentations – Linked to Egypt (3 weeks)	Applied IT: AI create setting Art – Iron Man	Research bees (1 week)	Processing Word Art linked to 'play the game' project age. (2 weeks)
4	SMART Privacy and Security	Copyright and Ownership	Online Relationships/ Online Bullying	Self-image and Identity Online Reputation	Health, Wellbeing and Lifestyle	Managing Online Information
	Crumble computer control spinners	Crumble computer control spinners	Scratch - Talk bot – digestion quiz	Teach Animation using DoInk Application to make 'live' show trailer	Scratch	Scratch music makers supporting 'light and sound' project
		Apply Word Skills – Leaflet for Land of Fire and Ice Saving on the school network. File Systems Open/Save/Save As		Using Excel spreadsheets – Fareham Town study (2 weeks)	PowerPoint skills linked to 'Roman' project. (3 weeks)	
5	SMART Privacy and Security	Online Relationships/ Self-image and Identity	Online Bullying (including Keeping Myself Safe PDL)	Managing Online Information Copyright and Ownership	Health, Wellbeing and Lifestyle	Online Reputation
	Teach - Scratch – teach cat and mouse	Scratch	Crumble Control Technology 'Lighthouses'	Crumble	Apply Scratch sound boards in 'Tour Guides wanted' Use green screen technology in photography	

		Excel Spreadsheets Planet fact files and using sort functions in Excel spreadsheets (2 weeks)		PowerPoints – Invaders and Settlers – Who was the Greatest King of 450-1066CE? (3 weeks) Applied – Type up evacuee letters – friend or Foe	Teach publisher to create '10 facts' about posters for Tour Guides Wanted (3 weeks)	Lead Chemical Chaos – Movie Maker to produce science video
6	SMART Privacy and Security	Managing Online Information	Online Relationships (including Keeping Myself Safe PDL)/ Online Bullying	Online Reputation	Health, Wellbeing and Lifestyle Self-image and Identity	
	Scratch	Scratch	Teach – Scratch – 'lizard pop' during 'Holes' project		Crumble teach 'Fairground Ride'	
	Excel – 'Keep on pumping' project graphs (2 weeks)	How Civilised! -PowerPoint – hyperlinking, video adding (3 weeks)	Peru – Research (1 week)			

Objectives covered by each year group

Updated February 2026	Digital Literacy More indepth E-Safety coverage in E-Safety folder	Information Technology	Computer Science and Networking	Enrichment Ideas
Year R	E-Safety -Introduce SAFE approach to internet safety. This should be embedded in classroom practise - I can recognise, online or offline, that anyone can say 'no' / 'please stop' / 'I'll tell' / 'I'll ask' - Explain why it is important to be considerate and kind to people online and to respect their choices. - know who to talk to if something has been put online without consent or if it is incorrect. - talk about how anyone experiencing bullying can get help. - talk about how to use the Internet as a way of finding information online. - explain rules to keep myself safe when using technology, both in and beyond the home - explain and give examples of what is meant by 'private' and 'keeping things private'.	**Input devices** -I can use a mouse click. Touch pad and touch screen to navigate and select items - I can use keyboard entry to type my own name **Word Processing – MS Word/Busy Things/iPads** -I can use a keyboard to type letters and numbers onto the computer screen **Photography Skills** -I can use an iPad to take and view photos which I have taken	**Bee-Bots** -programme the Bee-bot to move forward, backwards, turn left and turn right -begin to understand basic sequencing of instructions	*Easy Speak Microphones* *Active Primary Paint on IWB* *Recording sounds on laptops* *Busy Things*
Year 1	E-Safety -Introduce SAFE approach to internet safety. This should be embedded in classroom practise I can give examples of when and how to speak to an adult I can trust and how they can help. - give examples of how someone might use technology to communicate with others they don't also know offline and explain why this might be risky - explain how information put online about someone can last for a long time. - explain what bullying is, how people may bully others and how bullying can make someone feel - understand that we can encounter a range of things online, including things we like and don't like, as well as things which are real or make believe / a joke. - explain simple guidance for using technology in different environments and settings - explain how passwords can be used to protect information, accounts and devices. - save my work under a suitable title / name so that others know it belongs to me	**Word Processing – Busy Things – 'Tree Keys'** -I <mark>can begin to locate the keys on the QWERTY keyboard</mark> -I can type using one or more fingers on the keyboard **Word Processing – MS Word** -<mark>Locate the 'CAPS LOCK' or shift method for capitalising text, backspace for deleting letters or space bar for leaving a finger space</mark> -I can type my full name in MS Word, changing the font size, style and colour to make a name badge -I can type-up short sentences to improve my keyboard fluency -I can locate the full stop key and use it to mark my sentences **Web Browsing** -I can use the favourites bar within a web browser to visit linked (safe) websites to watch content and gather information which my teacher has set up using QR codes	**Blue-Bots** -<mark>programme the Blue-bot using an iPad to follow a short algorithm</mark> -use trial and error to solve bugs in my algorithms -begin to understand basic debugging of algorithms to correct errors using simple logic **Networking** -I can use my laptop login to access the school laptops and play an age-appropriate game	*Beard Man Code Disco* *Daisy Dinosaur – iPad Application* *Paint 3D*
Year 2	E-Safety -Introduce SAFE approach to internet safety. This should be embedded in classroom practise	**Word Processing – MS Word** -I can use word art to create headings -I can locate and use the full stop, space, enter and delete keys when writing in MS Word	**Blue-Bots** -programme the Blue-bot using an iPad to follow a short algorithm -use trial and error to solve bugs in my algorithms	*Beard Man Adventures*

	–give examples of how they might get help. - can use the Internet with adult support to communicate with people I know - describe how anyone's online information could be seen by others. - explain why anyone who experiences bullying is not to blame. - explain why some information I find online may not be real or true. - say how those rules / guides can help anyone accessing online technologies. - explain that passwords are used to protect information, accounts and devices. - understand that work created by others does not belong to me, even if I save a copy. - explain some rules for keeping personal information private	**Research Skills** -I can utilise SAFE searching when online and know how to keep myself safe when **Presentation Skills** -I can create a short informative poster about a topic. -I can combine text and images using BusyThings Publisher. -I can retrieve, insert and resize photographs. -I <mark>can make choices about how to present my poster and change font size, type and colour.</mark> -I can save and retrieve my document within BusyThings. **Data Handling** - I can talk about the different ways I use technology to collect information, including a camera, microscope or sound recorder. - I can make and save a chart or graph using the data I collect. - I can talk about the data that is shown in my chart or graph. - I am starting to understand a branching database. - I can tell you what kind of information I could use to help me investigate a question.	-begin to understand basic debugging of algorithms to correct errors using simple logic **Scratch Junior** -I can create my own sprites and stage backgrounds or load one from the given templates -I can select a command from within a wider range of options - I can plan for, and create, a longer algorithm with an end goal in mind - I can use simple logic to debug errors in someone else's algorithms - <mark>Explore using coding blocks to write simple algorithms in Scratch Junior</mark> **Networking** -I can use my login details to access my MS Team account -I can save my Teams work to the 'cloud' -I can load a Word document from MS Teams	
Year 3	**E-Safety** -Introduce SMART approach to internet safety. This should be embedded in classroom practise - explain how people can represent themselves in different ways online. - explain what it means to 'know someone' online and why this might be different from knowing someone - explain how to search for information about others online. - <mark>describe appropriate ways to behave towards other people online and why this is important.</mark> - analyse information to make a judgement about probable accuracy - explain why spending too much time using technology can sometimes have a negative impact on anyone - explain why copying someone else's work from the Internet without permission isn't fair and can explain what problems this might cause. - give reasons why someone should only share information with people they choose to and can trust	**Data Handling** - I can make and save a chart or graph using the data I collect (BusyThings transition. Revise Year 2 objectives) - I can add a title and axis labels to a bar chart in Busy Things. - <mark>I can make a chart or graph using the data I collect.</mark> - I can talk about the data that is shown in my chart or graph. I can save my graph as a pdf into a folder on the Student Saves Area **Data Handling Part 2 – Google Chrome Sheets** -I <mark>can understand and use the terminology: cells, rows, columns and spreadsheets when using Sheets</mark> **Word Processing – Google Chrome Docs or Slides** - I can insert a picture into Docs using copy and paste from the internet. - I can insert symbols - I can add a variety of frames and styles around my pictures - I can add transitions between my slides. - I can add animations to one of my slides -I can add and delete pages within my slideshow	**Scratch Programming** - I can use flow diagrams to sequence a series of instructions (1) - I can confidently navigate the Scratch user interface and locate the coding area, block palette , sprite pane and stage area. (2) - I can define the term algorithm (2) -I can join coding blocks in order to form a simple sequential algorithm (2) - I can change between a sprite's pre-set costumes (2) - I can add and delete my own sprites (2) - <mark>I can use simple input commands to begin my algorithm; 'when flag is clicked', 'when space is pressed' and 'when sprite is clicked' (3)</mark> - with support, I can use simple debugging skills to identify changes that I need to make to my algorithms. (4 + 6) - I can add a pre-set back drop to the stage area (5) - I can create a simple algorithm which includes a animated sprite talking and changing colour on a themed backdrop; controlled using a variety of inputs. (5) **Microbit**	Audiobook creation using AI to create settings
Year 4	**E-Safety** -Introduce SMART approach to internet safety. This should be embedded in classroom practise	**Word Processing/ Presentations– Google Chrome Docs and Slides** -I can use text boxes as an organisation device -I can insert pictures using copy and paste -I can 'wrap' pictures to allow easy placement within my leaflet	**Scratch** -I can confidently navigate the Scratch programming environment - With limited support, I can use simple debugging skills to identify changes that I need to make to my algorithms. **Scratch – Talk Bot**	Do Ink Animation – Making Interactive Year 3/4 Show Flyers

		-I can add titles and subtitles by using increased font size, underlining, italics and bold select tools. - I can add animations to multiple slides **Data – Handling Google Chrome Sheets** -I can enter data into cells, making changes when necessary - I can add line borders and colour to cells to help improve the clarity of the information stored in my spreadsheet	- I can use conditional statements within my program to control the sprite (if, answer = yes, then _____, else, _____) -I can use a question and answer input to interact with an end user -I can add recorded sounds to a sprite to act as a 'button' **Crumble Control** -I can use computer control to create a spinning top -I can combine a series of complex instructions in crumble -I can safely handle electrical equipment -I can create a parallel circuit including: a battery pack, a crumble controller, a motor, 4 wires and a USB lead. -I can identify bugs in my coding and try out different solutions to debug the programmes which I have made	
Year 5	**E-Safety** -Introduce SMART approach to internet safety. This should be embedded in classroom practise **SCARF – Spot Bullying** -I can identify different features of online bullying -I can demonstrate strategies to support myself (and others) who are victims of online bullying **SCARF – Communication** - I can understand that online communication can be misinterpreted - I can accept that responsible and respectful behaviour is necessary when interacting online as well as face-to-face **SCARF – Play, like, share** -social media platforms -your online profile/digital footprint -I can consider which information is safe to share online including my privacy settings -I can reflect on the consequences of sharing inappropriate content online - I can identify how to recognise disrespectful behaviour online and know how to deal with it **SCARF – Is it true?** -I can understand that images and information seen online are not always true and accurate -I can recognise that things can be posted online that aren't always true or accurate	**Word Processing/ Presentations– Google Chrome Docs and Slides** -I can use 'Align left, Align Right and Align Centre' to correctly type a letter -I can use shortcut keys for copy (Ctrl+C), cut (Ctrl+X) paste (Ctrl+V), bold (Ctrl+B), and underline (Ctrl+U) - I can use the 'Snip and Sketch' application to create evidence my work and share this with others. -I can use a voice recorder to narrate my slides in PowerPoint **Data – Handling Google Chrome Sheets** --I can use simple formulae within Sheets (e.g. SUM(G3:G10) to add the total number of moons in our Solar System) -I can use the data 'sort' function to organise my spreadsheet in different ways (size, order, alphabetical, number of moons)	**Scratch – Cat and Mouse Games** -I can explore the 'if' command. (touching and distance from colour) -I can use coordinate planes to control the starting position of my sprites. - I can independently use simple debugging skills to identify changes that I need to make to my algorithms. - I can use simple debugging skills to identify changes that I need to make to my code. **Crumble Control –** Creating a computer-controlled light -I can use a computer coding to control a light -I can combine a series of instructions in crumble -I can safely handle electrical equipment -I can create a parallel circuit which includes a battery pack, crumble controller, wires, a bulb holder and a bulb, LEDs and an LDR -I can identify bugs in my coding and seek help to debug my programme if needed	
Year 6	**E-Safety** -Introduce SMART approach to internet safety. This should be embedded in classroom practise **SCARF – To share or not to share?** - I know that is illegal to create and share sexual images of children under 16 years old	**Word Processing/ Presentations– Google Chrome Docs and Slides** -Continue to provide opportunities for children to consolidate previously learnt skills in MS Word can insert hyperlinks and videos into my PowerPoint presentations -I can generate QR codes for other people to use **Data – Handling Google Chrome Sheets**	**Scratch – Monkey Pop Game!** -I can use created variables, to add timers and scoring systems to my games -I can design my own game using different levels -I can use broadcast messages within my coding -I can evaluate the effectiveness of my own coding	AI to hot-seat characters

	- I can explore the risks of sharing photos of themselves or others online - I know how to keep my information private online **SCARF – Pressure Online** -I can understand the risks of sharing images online and how these are hard to control once shared -understand that people can feel pressured to act in certain ways online due to peer pressure **SCARF – Fakebook Friends** -I know the legal age (and reasons) for having a social media account -I can understand why people don't always tell the truth online and they only post the 'good bits' online **SCARF – Traffic Lights** -I can identify strategies for keeping personal information safe online -I can describe safe behaviours when using communication technology **SCARF – Think before you click** - I can accept that responsible and respectful behaviour is necessary when interacting online as well as face-to-face - I can understand and describe the ease with which something posted online can spread **SCARF – It's a puzzle** -Objectives recapped from Year 6	--I can use create simple bar/line graphs from the data stored in my Sheets	-I can provide a user with feedback on their performance within a game (e.g. scores, times, well done messages) **Crumble Control – Fairground Rides** -I can use computer control to create a moving fairground ride -I can combine a series of complex instructions in crumble to address a given criteria -I can safely handle electrical equipment -I can create a parallel circuit including: a battery pack, a crumble controller, a motor, wires, a bulb, a bulb holder and a USB lead. -I can identify bugs in my own coding and try out different solutions to debug the programmes which I have made -I can incorporate an LED light into my fairground ride design	