



Computing Long Term Curriculum Map 23-24



Intent

The intention of the Computing Curriculum at St Anselm's Primary School is to inspire our children with a fascination and curiosity about the world around them that will stay with them throughout their lives. We aspire for our children to be masters of technology, as we know that technology will play a pivotal part of their lives. We aim for our teaching of computing to develop creators, not consumers and plan a broad curriculum encompassing computer science, information technology and digital literacy reflects this. We support our children to understand that there is always a choice with technology and we role model using technology, in particular social media, positively and safely.

We aim for our children to be aware of online safety throughout their education, and recognise that being educated and aware of the dangers online is the best prevention policy. We ensure Online Safety is threaded throughout the curriculum, in all areas of learning, to develop children's awareness of keeping safe, and best strategies to deal with difficulties as they occur. We recognise that technology can allow pupils to share their learning in creative ways, and we aim for some of this learning to be shared with parents and the local community. Our knowledge rich curriculum is balanced with the opportunity for pupils to apply their knowledge creatively which will in turn help our pupils become skilful computer scientists. We encourage staff to try and embed computing across the whole curriculum to make learning creative and accessible. We aim for our pupils to be fluent with a range of tools to best express their understanding and to develop the confidence and independence to choose the best tool to fulfil the task and challenge set by teachers.



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St Anselm's Computing Knowledge and Skills Progression Map 2023-24						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	Understanding the World: Technology Online safety: Self-image and identity [DL] Online Relationships [DL] Online Reputation [DL]		Understanding the World: Technology Online safety: Online Bullying [DL] Safer Internet Day- Digi duck says... Managing Online Information [DL]		Understanding the World: Technology Online safety: Health, wellbeing and lifestyle [DL] Privacy and Security [DL] Copyright and Ownership [DL]	
Year 1	We are storytellers – creating talking books [IT and DL] We are celebrating - Creating a card digitally [IT and DL] Online safety: Self-image and identity [DL] Online Relationships [DL] Online Reputation [DL]		We are painters - Illustrating an eBook [IT and DL] Online safety: Online Bullying [DL] Safer Internet Day- SMART rules Managing Online Information [DL]		We are treasure hunters - Using programmable toys [CS] Online safety: Health, wellbeing and lifestyle [DL] Privacy and Security [DL] Copyright and Ownership [DL]	
Year 2	We are astronauts - Programming on screen [CS] Online safety: Self-image and identity [DL] Online Relationships [DL] Online Reputation [DL]		We are games testers - Exploring how computer games work [CS] Online safety: Online Bullying [DL] Safer Internet Day- SMART rules Managing Online Information [DL]		We are photographers - Taking better photos [IT and DL] Online safety: Health, wellbeing and lifestyle [DL] Privacy and Security [DL] Copyright and Ownership [DL]	
Year 3	Microsoft word skills [IT] and Scratch/J2Code [CS] Online safety: Self-image and identity [DL] Online Relationships [DL] Online Reputation [DL]		Animation [IT] Online safety: Online Bullying [DL] Safer Internet Day- SMART rules Managing Online Information [DL]		Kodu [CS] Online safety: Health, wellbeing and lifestyle [DL] Privacy and Security [DL] Copyright and Ownership [DL]	
Year 4	Block coding-Scratch/J2Code [CS] Online safety: Self-image and identity [DL] Online Relationships [DL] Online Reputation [DL]		Garage band / Isle of Tune to produce digital music. [IT] Online safety: Online Bullying [DL] Safer Internet Day- SMART rules Managing Online Information [DL]		PowerPoint-Windows [CS] Online safety: Health, wellbeing and lifestyle [DL] Privacy and Security [DL] Copyright and Ownership [DL]	
Year 5	Understanding computer networks [CS] and Coding with Tynker [CS] Online safety: Self-image and identity [DL] Online Relationships [DL] Online Reputation [DL]		Animations [IT] Online safety: Online Bullying [DL] Safer Internet Day- SMART rules Managing Online Information [DL]		Coding with Scratch/J2Code [CS] & Code Bugs [CS] Online safety: Health, wellbeing and lifestyle [DL] Privacy and Security [DL] Copyright and Ownership [DL]	
Year 6	Coding-Tynker [CS] Online safety: Self-image and identity [DL] Online Relationships [DL] Online Reputation [DL]		Animation and Green Screen [IT] Online safety: Online Bullying [DL] Safer Internet Day- SMART rules Managing Online Information [DL]		Spreadsheets and Publisher [IT] Online safety: Health, wellbeing and lifestyle [DL] Privacy and Security [DL] Copyright and Ownership [DL]	



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Reception									
	Autumn			Spring			Summer		
Topic	Understanding the World: Technology			Understanding the World: Technology			Understanding the World: Technology		
	Self-image and identity [DL]	Online Relationships [DL]	Online Reputation [DL]	Online Bullying [DL]	Safer Internet Day- Digi duck says...	Managing Online Information [DL]	Health, wellbeing and lifestyle [DL]	Privacy and Security [DL]	Copyright and Ownership [DL]
Intent	As children enter into Reception, they learn to deal with their emotions and how they seek help if they are sad or upset. This will be covered both in real life and online.			After looking at how to deal with anything online that makes them feel sad- the focus will be their own behaviour online. Linked to the digiduck rules: be a good friend online, say kind things to others and make sensible choices. They have a book in class to explore this further linked to safer internet day.			To prepare them for Year 1 where they will all log on during each computing lesson, children will learn about the purpose of passwords and keeping their information safe. Ensuring the ELG are met, children will have more time to complete simple programmes on the computers.		
Local links	At home: relating to their world and experiences			At home and at school: how technology is used in the world around them e.g. supermarkets, electronic devices, parents' phones			At home and at school: how privacy is important to everyone.		
Curriculum links	All about me Celebrations			People who help us Growing			Animals Water		
Knowledge	Understanding the World: Technology: <ul style="list-style-type: none"> To know how toys can work through mechanisms, achieving special effects. 			Understanding the World: Technology: <ul style="list-style-type: none"> To know how equipment works and can be controlled. To know that information can be retrieved from computers. 			Understanding the World: Technology: <ul style="list-style-type: none"> To complete a simple program on a computer (40-60+ months). To recognise that a range of technology is used in places such as homes and schools (ELG). 		
	Self-image and identity [DL]: <ul style="list-style-type: none"> I know that I can say "no", "please stop", "I'll tell" and "I'll ask" to somebody who asks me to do something that makes me feel sad, embarrassed or upset. I know that there may be people online who could make me feel sad, embarrassed or upset. I can explain how this could either be in real-life or online. Online Relationships [DL]: <ul style="list-style-type: none"> I know some ways in which the internet can be used to communicate. 			Online Bullying [DL]: <ul style="list-style-type: none"> I know how to behave online- in ways that do not upset others and give examples. Safer Internet Day- Digi duck says... <ul style="list-style-type: none"> I know how to be a good friend online. Managing Online Information [DL]: <ul style="list-style-type: none"> I know that I can use the internet to find things out. I know which devices I could use to access information on the internet. I know how to find information (e.g. Search 			Health, wellbeing and lifestyle [DL]: <ul style="list-style-type: none"> I know some rules that help keep me safe and healthy in and beyond the home when using technology. Privacy and Security [DL]: <ul style="list-style-type: none"> I know examples of personal information (e.g. name, address, age, birthday, location). I know the people I can trust and can share personal information with; I can explain why I can trust them. I know why I should always ask a trusted adult before I share any information about myself online. 		



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	<ul style="list-style-type: none"> • I can give examples of how I might use technology to communicate with people I know. • I know why it is important to be considerate and kind to people online. <p>Online Reputation [DL]:</p> <ul style="list-style-type: none"> • I know ways that I can put information on the internet. • I know that information can stay online and can be copied. • I know what information I should not put online without asking a trusted adult first. 	<p>engine, voice activated searching).</p>	<ul style="list-style-type: none"> • I know how passwords can be used to protect information and devices. <p>Copyright and Ownership [DL]:</p> <ul style="list-style-type: none"> • I know that work I create belongs to me. • I know that content on the internet may belong to other people.
Skills	<p>Understanding the World: Technology:</p> <ul style="list-style-type: none"> • I can operate mechanical toys, e.g. turns the knob on a wind-up toy or pulls back on a friction car. • I can show an interest in technological toys with knobs or pulleys, or real objects such as cameras or mobile phones. • I can make toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images. 	<p>Understanding the World: Technology:</p> <ul style="list-style-type: none"> • I acquire basic skills in turning on and operating some ICT equipment. • I can operate simple games and interactive apps using equipment. • I can find out the answer to something using technology with support. 	<p>Understanding the World: Technology:</p> <ul style="list-style-type: none"> • I can use ICT hardware to interact with age-appropriate computer software. • I can select and use technology for particular purposes.
	<p>Self-image and identity [DL]:</p> <ul style="list-style-type: none"> • If something happens that makes me feel sad, worried, uncomfortable or frightened I can speak to an adult I can trust. <p>Online Relationships [DL]:</p> <ul style="list-style-type: none"> • I can use the internet with adult support to communicate with people I know. <p>Online Reputation [DL]:</p> <ul style="list-style-type: none"> • I can make sure the information I put online is suitable. 	<p>Online Bullying [DL]:</p> <ul style="list-style-type: none"> • I can describe ways that people can be unkind online. • I can offer examples of how this can make others feel. <p>Safer Internet Day- Digi duck says...</p> <ul style="list-style-type: none"> • I can be a good friend online. • I can say kind things to others. • I can make sensible choices online. <p>Managing Online Information [DL]:</p> <ul style="list-style-type: none"> • I can use the internet to find things out. • I can use simple key words in search engines. • I can describe and demonstrate how to get help from a trusted adult or helpline if I find content that makes me feel sad, uncomfortable, worried or frightened. 	<p>Health, wellbeing and lifestyle [DL]:</p> <ul style="list-style-type: none"> • I can give some simple examples of how to keep safe in and beyond the home when using technology. <p>Privacy and Security [DL]:</p> <ul style="list-style-type: none"> • I can give examples of the information I must not share online. • I can use a password to protect my information and devices. <p>Copyright and Ownership [DL]:</p> <ul style="list-style-type: none"> • I can name my work so that others know it belongs to me. • I can explain why work I create using technology belongs to me. • I can say why it belongs to me (e.g. "It is my idea" or "I designed it")



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Year 1									
Topic	Autumn			Spring			Summer		
	Self-image and identity [DL]	Online Relationships [DL]	Online Reputation [DL]	Online Bullying [DL]	Safer Internet Day- SMART rules	Managing Online Information [DL]	Health, wellbeing and lifestyle [DL]	Privacy and Security [DL]	Copyright and Ownership [DL]
	We are storytellers – Creating talking books We are celebrating - Creating a card digitally [IT and DL]			We are painters - Illustrating an eBook [IT and DL]			We are treasure hunters - Using programmable toys [CS]		
Intent	<p>Reception covered elements of self-image and identity so children should know what to do if they feel sad or upset in real life or online. They will now learn that identities online may not always be true.</p> <p>The children perform a nativity in Autumn 2 so will know the Nativity very well. A card will enable them to practise IT skills at a basic level linked to religious pictures seen in local church stained glass windows and their own Nativity play.</p>			<p>Linked to safer internet day and moving on from Digiduck rules covered in Reception, the children will be introduced to the SMART rules.</p> <p>The children are reading 'Where the Wild Things Are' so they will illustrate parts of this book as will be familiar to them. They should have the basic skills- logging on, basic typing so this will increase skills with another programme.</p>			<p>Year 1 have individual passwords which they will have been using. They will also have learnt to save and open work. This topic will explain to them the importance of passwords and keeping them private.</p> <p>The children are covering a topic on pirates so this links really well. The children have covered 2 IT topics to ensure they cover the basic skills allowing them to use the computers. This will introduce them to CS which will continue into Year 2 (2 topics of CS).</p>		
Local links	Our Lady and St Thomas of Canterbury St Mary's church			Gayton Library- to have the book read to them.			Local treasure hunt using QR codes		
Curriculum links	Preparing to celebrate the birth of Jesus and the Nativity (RE)			Where the Wild Things Are (Topic)			Pirates (Topic)		
Knowledge	<p>Creating talking books:</p> <ul style="list-style-type: none"> Use sound recording equipment to record sounds. Develop collaboration skills as they work together in pairs or as a whole class. Understand how a talking book differs from a paper-based book. Talk about and reflect on their use of ICT. Share recordings with an audience. Develop skills in saving and storing sounds on the computer. <p>Creating a card digitally:</p> <ul style="list-style-type: none"> To know they have a login and password to keep their work safe and private. 			<p>Illustrating an eBook:</p> <ul style="list-style-type: none"> To understand how this use of ICT differs from using paint and paper. To know pictures can be edited. To know how to save their work. To know how to retrieve their previous work. To recognise common uses of information technology beyond school. 			<p>Using programmable toys:</p> <ul style="list-style-type: none"> To understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. To know how to create and debug simple programs. To know how to use logical reasoning to predict the behaviour of simple programs. 		



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	<ul style="list-style-type: none"> To know the use of a keyboard and mouse. To know that the internet can help us find pictures. To know that work can be saved and opened. To know how to use technology safely and respectfully, keeping personal information private. 		
	<p>Self-image and identity [DL]:</p> <ul style="list-style-type: none"> To know that people’s identity online can be different to their identity in real life To know that people might make themselves look different online. To know what is meant by the term ‘identity.’ <p>Online Relationships [DL]:</p> <ul style="list-style-type: none"> To know that the internet can be used to communicate with people I don’t know well (e.g. email a pen pal in another school or country) <p>Online Reputation [DL]:</p> <ul style="list-style-type: none"> To know that information put online about me can last a long time. To know who to talk to if I think someone has made a mistake about putting something online. 	<p>Online Bullying [DL]:</p> <ul style="list-style-type: none"> To know what bullying behaviour is and how it could look online. To understand how bullying can make someone feel. To know how someone can / would get help if they were being bullied online and offline <p>Safer Internet Day- Digi duck says...</p> <ul style="list-style-type: none"> To know what the SMART rules are. <p>Managing Online Information [DL]:</p> <ul style="list-style-type: none"> To know how to get help from a trusted adult or helpline if I find content that makes me feel sad, uncomfortable worried or frightened To know how to navigate a simple webpage to get information I need (e.g. home, forward, back buttons, links, tabs and sections.) To know how to use key words in search engines. To know what voice activated searching is and how it might be used (e.g. Alexa, google, Siri). To know the difference between things that are imaginary, ‘made up’ or ‘make believe’ and things that are ‘true’ or ‘real’. To know that some information I find online may not be true. 	<p>Health, wellbeing and lifestyle [DL]:</p> <ul style="list-style-type: none"> To know how to use technology in different environments and settings. <p>Privacy and Security [DL]:</p> <ul style="list-style-type: none"> To know how online information about me could be seen by others. To know some rules for keeping information private. To know what passwords are and how they can keep my information safe. <p>Copyright and Ownership [DL]:</p> <ul style="list-style-type: none"> To know that other people’s work belongs to them. To know that content on the internet may belong to other people.
<p>Skills</p>	<p>Creating a card digitally: <u>Information Technology</u></p> <ul style="list-style-type: none"> I can develop basic keyboard skills, through typing and formatting text. I can develop basic mouse skills. I can use the web to find and select images. I can develop skills in storing and retrieving files. I can develop skills in combining text and images. I can discuss their work and think about whether it could be improved. 	<p>Illustrating an eBook: <u>Digital Literacy</u></p> <ul style="list-style-type: none"> I can use the web safely to find ideas for an illustration. <p><u>Information Technology</u></p> <ul style="list-style-type: none"> I can select and use appropriate painting tools to create and change images on the computer. I can create an illustration for a particular purpose. I know how to save, retrieve and change my work. 	<p>Using programmable toys: <u>Computer Science</u></p> <ul style="list-style-type: none"> I understand that a programmable toy can be controlled by inputting a sequence of instructions. I can develop and record sequences of instructions as an algorithm. I can program the toy to follow my algorithm. I can debug my programs. I can predict how my programs will work.



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	<p>Creating talking books:</p> <ul style="list-style-type: none"> I can use sound recording equipment with guidance I can work with a partner to create sounds and record I can begin to explain how a talking book and a pare book are different 	<ul style="list-style-type: none"> I can reflect on my work and act on feedback received. 	
	<p>Self-image and identity [DL]:</p> <ul style="list-style-type: none"> I can explain how other people’s identity online can be different to their identity in real life. I can describe ways in which people might make themselves look different online. I can give examples of issues online that might make me feel sad, worried, uncomfortable or frightened. I can give examples of how I might get help. I can explain what is meant by the term ‘identity.’ <p>Online Relationships [DL]:</p> <ul style="list-style-type: none"> I can use the internet to communicate with people I don’t know well (e.g. email a pen pal in another school or country) I can give examples of how I might use technology to communicate with others I don’t know well. <p>Online Reputation [DL]:</p> <ul style="list-style-type: none"> I can explain how information put online about me can last a long time. I know who to talk to if I think someone has made a mistake about putting something online. 	<p>Online Bullying [DL]:</p> <ul style="list-style-type: none"> I can give examples of bullying behaviour and how it could look online. I understand how bullying can make someone feel. I can talk about how someone can / would get help about being bullied online and offline. <p>Safer Internet Day- SMART rules</p> <ul style="list-style-type: none"> I can explain how the SMART rules keep me safe online and can use them when using the internet at school and at home. <p>Managing Online Information [DL]:</p> <ul style="list-style-type: none"> I can use simple key words in search engines. I can describe and demonstrate how to get help from a trusted adult or helpline if I find content that makes me feel sad, uncomfortable worried or frightened. I can demonstrate how to navigate a simple webpage to get information I need (e.g. home, forward, back buttons, links, tabs and sections.) I can use key words in search engines. I can demonstrate how to navigate a simple webpage to get information I need. (e.g. home, forward, back buttons, links, tabs and sections). I can explain what voice activated searching is and how it might be used (e.g. Alexa, google, Siri). I can explain the difference between things that are imaginary, ‘made up’ or ‘make believe’ and things that are ‘true’ or ‘real’. I can explain why some information I find online may not be true. 	<p>Health, wellbeing and lifestyle [DL]:</p> <ul style="list-style-type: none"> I can explain simple guidance for using technology in different environments and settings. I can say how those rules / guides can help me. <p>Privacy and Security [DL]:</p> <ul style="list-style-type: none"> I can describe how online information about me could be seen by others. I can describe and explain some rules for keeping my information private. I can explain what passwords are and can use passwords for my accounts and devices. I can explain how many devices in my home could be connected to the internet and can list some of those devices. <p>Copyright and Ownership [DL]:</p> <ul style="list-style-type: none"> I can describe why other people’s work belongs to them. I can recognise that content on the internet may belong to other people



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Year 2									
	Autumn			Spring			Summer		
Topic	Self-image and identity [DL]	Online Relationships [DL]	Online Reputation [DL]	Online Bullying [DL]	Safer Internet Day- SMART rules	Managing Online Information [DL]	Health, wellbeing and lifestyle [DL]	Privacy and Security [DL]	Copyright and Ownership [DL]
	We are astronauts - Programming on screen [CS]			We are games testers - Exploring how computer games work [CS]			We are photographers - Taking better photos [IT and DL]		
Intent	Introduction to a new online safety topic. Can draw on knowledge from the topic self-image and identity. Year 1 completed a computer science unit in the summer term so to build on these skills, we will start with another computer science unit. It builds on using instructions to programme something.			Introduction to a new online safety topic. SMART rules will have been introduced in Year 1. To further build on their computer science skills, the children will now begin to build a computer game.			Introduction to a new online safety topic. Can draw on knowledge from the topic privacy and security. A new skill for children. Many will know how to use cameras on devices used at home. This will develop these skills enabling them to edit and review photographs.		
Local links	Create a poster to be shared with KS1 chn in other schools in Harrow for online safety			Invite parents and local community to play games as part of a parent workshop			The local area- including the school grounds and the church.		
Curriculum link	Link to reading: Astronauts/space and adventure stories			Link to reading: fantasy and 'out of this world' adventure stories			Link to reading: Non fiction texts featuring photographs (natural world, animals, cities and countryside)		



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Knowledge	<p>We are astronauts - Programming on screen:</p> <ul style="list-style-type: none">To understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.To know how to create and debug simple programs.To know how to use logical reasoning to predict the behaviour of simple programs.To know how to spot and fix (debug) errors.To recognise common uses of information technology beyond school. <p>Self-image and identity [DL]:</p> <ul style="list-style-type: none">To know that people's identity online can be different to their identity in real lifeTo know that people might make themselves look different online.To know what is meant by the term 'identity.' <p>Online Relationships [DL]:</p> <ul style="list-style-type: none">To know that the internet can be used to communicate with people I don't know well (e.g. email a pen pal in another school or country) <p>Online Reputation [DL]:</p> <ul style="list-style-type: none">To know that information put online about me can last a long time.To know who to talk to if I think someone has made a mistake about putting something online.	<p>We are games testers - Exploring how computer games work:</p> <ul style="list-style-type: none">To understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.To know how to use logical reasoning to predict the behaviour of simple programs. To know how to test these predictions.To know how algorithms work within a computer game. <p>Online Bullying [DL]:</p> <ul style="list-style-type: none">To know what bullying behaviour is and how it could look online.To understand how bullying can make someone feel.To know how someone can / would get help if they were being bullied online and offline <p>Safer Internet Day- Digi duck says...</p> <ul style="list-style-type: none">To know what the SMART rules are. <p>Managing Online Information [DL]:</p> <ul style="list-style-type: none">To know how to get help from a trusted adult or helpline if I find content that makes me feel sad, uncomfortable worried or frightenedTo know how to navigate a simple webpage to get information I need (e.g. home, forward, back buttons, links, tabs and sections.)To know how to use key words in search engines.To know what voice activated searching is and how it might be used (e.g. Alexa, google, Siri).To know the difference between things that are imaginary, 'made up' or 'make believe' and things that are 'true' or 'real'.To know that some information I find online may not be true.	<p>We are photographers - Taking better photos:</p> <ul style="list-style-type: none">To know how to use technology purposefully to create, organise, store, manipulate and retrieve digital content.To know how to 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.To know what devices have a digital camera.To know photos can be taken, edited, reviewed and shared. <p>Health, wellbeing and lifestyle [DL]:</p> <ul style="list-style-type: none">To know how to use technology in different environments and settings. <p>Privacy and Security [DL]:</p> <ul style="list-style-type: none">To know how online information about me could be seen by others.To know some rules for keeping information private.To know what passwords are and how they can keep my information safe. <p>Copyright and Ownership [DL]:</p> <ul style="list-style-type: none">To know that other people's work belongs to them.To know that content on the internet may belong to other people.
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<p>Skills</p>	<p>We are astronauts - Programming on screen: <u>Computer Science</u></p> <ul style="list-style-type: none"> I have a clear understanding of algorithms as sequences of instructions. I can convert simple algorithms to programs. I can predict what a simple program will do. I can spot and fix (debug) errors in their programs. 	<p>We are games testers - Exploring how computer games work: <u>Computer Science</u></p> <ul style="list-style-type: none"> I can describe carefully what happens in computer games. I can use logical reasoning to make predictions of what a program will do. I can test these predictions. I think critically about computer games and their use. <p><u>Digital Literacy</u></p> <ul style="list-style-type: none"> I can use games safely and in balance with other activities. 	<p>We are photographers - Taking better photos: <u>Information Technology</u></p> <ul style="list-style-type: none"> I can consider the technical and artistic merits of photographs. I can use a digital camera or camera app. I can take digital photographs. I can review and reject or rate the images they take. I can edit and enhance my photographs. I can select my best images to include in a shared portfolio.
	<p>Self-image and identity [DL]:</p> <ul style="list-style-type: none"> I can explain how other people’s identity online can be different to their identity in real life. I can describe ways in which people might make themselves look different online. I can give examples of issues online that might make me feel sad, worried, uncomfortable or frightened. I can give examples of how I might get help. <p>I can explain what is meant by the term ‘identity.’</p> <p>Online Relationships [DL]:</p> <ul style="list-style-type: none"> I can use the internet to communicate with people I don’t know well (e.g. email a pen pal in another school or country) I can give examples of how I might use technology to communicate with others I don’t know well. <p>Online Reputation [DL]:</p> <ul style="list-style-type: none"> I can explain how information put online about me can last a long time. I know who to talk to if I think someone has made a mistake about putting something online. 	<p>Online Bullying [DL]:</p> <ul style="list-style-type: none"> I can give examples of bullying behaviour and how it could look online. I understand how bullying can make someone feel. I can talk about how someone can / would get help about being bullied online and offline. <p>Safer Internet Day- SMART rules</p> <ul style="list-style-type: none"> I can explain how the SMART rules keep me safe online and can use them when using the internet at school and at home. <p>Managing Online Information [DL]:</p> <ul style="list-style-type: none"> I can use simple key words in search engines. I can describe and demonstrate how to get help from a trusted adult or helpline if I find content that makes me feel sad, uncomfortable worried or frightened. I can demonstrate how to navigate a simple webpage to get information I need (e.g. home, forward, back buttons, links, tabs and sections.) I can use key words in search engines. I can demonstrate how to navigate a simple webpage to get information I need. (e.g. home, forward, back buttons, links, tabs and sections). I can explain what voice activated searching is and how it might be used (e.g. Alexa, google, Siri). 	<p>Health, wellbeing and lifestyle [DL]:</p> <ul style="list-style-type: none"> I can explain simple guidance for using technology in different environments and settings. I can say how those rules / guides can help me. <p>Privacy and Security [DL]:</p> <ul style="list-style-type: none"> I can describe how online information about me could be seen by others. I can describe and explain some rules for keeping my information private. I can explain what passwords are and can use passwords for my accounts and devices. I can explain how many devices in my home could be connected to the internet and can list some of those devices. <p>Copyright and Ownership [DL]:</p> <ul style="list-style-type: none"> I can describe why other people’s work belongs to them. I can recognise that content on the internet may belong to other people



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		<ul style="list-style-type: none">• I can explain the difference between things that are imaginary, 'made up' or 'make believe' and things that are 'true' or 'real'.• I can explain why some information I find online may not be true.	
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Computing Long Term Curriculum Map 23-24



Year 3									
Topic	Self-image and identity [DL]	Online Relationships [DL]	Online Reputation [DL]	Online Bullying [DL]	Safer Internet Day- SMART rules	Managing Online Information [DL]	Health, wellbeing and lifestyle [DL]	Privacy and Security [DL]	Copyright and Ownership [DL]
	Microsoft word skills [IT]			Animation [IT]			Kodu [CS]		
Intent	<p>Pupils will have started to learn how to use a keyboard in KS1. This unit will help them to develop their keyboard skills. It will also teach them how to word process, a skill which they can use across the whole curriculum.</p> <p>Scratch/J2Code [CS] This is to cover the computer Science part of the curriculum where pupils are required to design, write and debug programs that accomplish specific goals.</p>			<p>Pupils will be introduced to different types of animation, beginning with an overview of early types of animation. It will teach them the features of the Puppet pals app. They will also learn how story boards are an important part of creating an animation. Pupils will be introduced to a stop frame animation app to create a simple stop frame animation</p>			<p>This is a continuation of knowledge and skills to be covered in the computer science part of the curriculum.</p>		
Local links	Use word to create poster for online safety LKS2 competition with Harrow Schools.			Pictures can be taken of the local area to incorporate into animations in puppet pals.			Invite local community to school for a Kodu workshop, sharing what they know and can do using Kodu.		
Curriculum link	<p>The pupils will create documents relating to topics they are doing in class in a variety of different subject areas.</p> <p>English-dialogue between characters Maths-sequencing</p>			<p>Puppet pals can be used across all areas of the curriculum as it is a great application for storytelling.</p> <p>The stop frame animation project will be based on a current topic e.g. a bee pollenating a flower(science).</p>			<p>Geography-learning about different types of terrain.</p>		
Knowledge	<p>Microsoft word skills [IT]</p> <ul style="list-style-type: none"> To manipulate the text on a page to fit a purpose. To align text. To use the menu buttons for bullets and numbering. To learn how keyboard shortcuts can be used. To insert and format text boxes. <p>Scratch/J2Code [CS]</p> <ul style="list-style-type: none"> Animations using Scratch/J2Code 			<ul style="list-style-type: none"> To take screen shots of images to upload to photo library on the iPad. To select suitable backgrounds as well as uploading backgrounds from camera and photo library. To select and create different characters for animations. To add speech to animation they have created. To know the features iStop motion app. 			<p>Kodu [CS] Kodu Basics (CS)</p> <ul style="list-style-type: none"> To use the terrain tools to create an interesting game environment. To control the movement and actions of a sprite. To program a sprite to collect objects and earn points. To use pathways and create roads, walls and platforms. 		



Computing Long Term Curriculum Map 23-24



	<ul style="list-style-type: none"> To code using blocks, rename sprites and switch costumes to create animation of sprites. To program two sprites to tell each other a joke. To create a broadcast conversation between three (or more) sprite 	<ul style="list-style-type: none"> To know how a series of frames taken by the app can create an animation. 	<ul style="list-style-type: none"> To add another sprite to my environment to make it more exciting. To self and peer-assess my own and others' work. To export Kodu projects to a shard area on the network.
	<p>Self-image and identity [DL]:</p> <ul style="list-style-type: none"> To understand what is meant by self-image and identity To know what avatar means. To know what is meant by identity. To know something about my identity that is unique to me. <p>Online Relationships [DL]:</p> <ul style="list-style-type: none"> To know how easy it is to find information about people online. To know what information should be shared online. To know that information to be copied, created, edited and shared by others. <p>Online Reputation [DL]:</p> <ul style="list-style-type: none"> To know that information about me can be found online. To know that I need to be careful about what I post online and that I should ask if I am unsure. 	<p>Online Bullying [DL]:</p> <ul style="list-style-type: none"> To know what bullying is. To know how to behave online. To know when bullying can take place online. To know how content that I post might affect others, their feelings and how it might affect how others feel about them (their reputation). To know how to get help if I or somebody else faces bullying online. To know how to report concerns both in school and at home about online bullying. <p>Safer Internet Day- SMART rules</p> <ul style="list-style-type: none"> To know how the SMART rules keep me safe online. <p>Managing Online Information [DL]:</p> <ul style="list-style-type: none"> To know what autocomplete is and how to choose the best suggestion. To know that the internet can be used to buy and sell things. To know the difference between a 'belief', an 'opinion' and a 'fact'. To know that some people I 'meet online' (e.g. through social media) may be computer programs pretending to be real people. 	<p>Health, wellbeing and lifestyle [DL]:</p> <ul style="list-style-type: none"> To know the negative impact of spending too much time on technology. To know strategies to help me to control the time I spend on technology. <p>Privacy and Security [DL]:</p> <ul style="list-style-type: none"> To know reasons why I should only share information with people I choose to and can trust. To understand and give reasons why passwords are important. To know that if I'm not sure or I feel pressurised, I should ask a trusted adult. To know strategies for creating and keeping passwords private. To describe how connected devices can collect and share my information with others. To know that others online can pretend to be me or other people including my friends. I can suggest reasons why they might do this. To know what to do if my password is lost or stolen. <p>Copyright and Ownership [DL]:</p> <ul style="list-style-type: none"> To know that when copying someone else's work from the internet without permission, it can cause problems. To know that I must think about who owns the information I see online and whether I am able to use it.
<p>Skills</p>	<p>Microsoft word skills [IT]</p> <ul style="list-style-type: none"> I can insert text in a document. I know how to use the shift key, return, delete and other features of the keyboard. I can insert images into a document. 	<ul style="list-style-type: none"> I can insert a background from app or one I have uploaded. I can select or create a character for my animation 	<p>Kodu Basics (CS)</p> <ul style="list-style-type: none"> I can create a game using my coding knowledge. I can use the terrain tools to create an interesting game environment.



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	<ul style="list-style-type: none"> • I can format the image • I know how to copy, cut and paste • I can save work into a specific folder. • I am able to retrieve work <p>Scratch/J2Code [CS]</p> <ul style="list-style-type: none"> • I can use Scratch/J2Code to program a sprite • I can code using looks blocks to switch costume which will create animation of my sprite. • I can rename, change the size and direction of my sprites. • I can add simple speech commands. • I can program two sprites to speak at different times. 	<ul style="list-style-type: none"> • I can record my characters as they move and speak. • I know some features of the iMotion app • I can know how to create an animation by changing parts of a drawing. • I can create an animation by moving an object in small increments and capturing frames. • I can upload my animation to myuso 	<ul style="list-style-type: none"> • I can control the movement and actions of a sprite. • I can program a sprite to collect objects and earn points. • I can self and peer-assess my own and others' work.
	<p>Self-image and identity [DL]:</p> <ul style="list-style-type: none"> • I can explain what is meant by the term 'identity'. • I can explain how I can represent myself in different ways online. • I can explain ways in which and why I might change my identity depending on what I am doing online (e.g. gaming, using an avatar, social media). • I can explain how my online identity can be different to the identity I present in 'real life'. • I can describe the right decisions about how I interact with others and how others perceive me. <ul style="list-style-type: none"> • I can describe issues online that might make me and others feel sad, worried, uncomfortable or frightened. I know and can give examples of how I might get help, both on and offline. <p>Online Relationships [DL]:</p> <ul style="list-style-type: none"> • I can describe ways people who have similar likes and interests can get together online. • I can give examples of technology-specific forms of communication (e.g. emojis, acronyms, text speak). • I can explain some risks of communications online with others I don't know well. 	<p>Online Bullying [DL]:</p> <ul style="list-style-type: none"> • I can explain what bullying is and can describe how people may bully others. • I can describe rules about how to behave online and how I follow them. • I can identify some online technologies where bullying might take place. • I can explain why I need to think carefully about how content I post might affect others, their feelings and how it might affect how others feel about them (their reputation). • I can recognise when someone is upset, hurt, or angry online. • I can describe how to get help for someone that is being bullied online and assess when I need to do or say something or tell someone. • I can identify a range of ways to report concerns both in school and at home about online bullying. <p>Safer Internet Day- SMART rules</p> <ul style="list-style-type: none"> • I can explain how the SMART rules keep me safe online and can use them when using the internet at school and at home. <p>Managing Online Information [DL]:</p>	<p>Health, wellbeing and lifestyle [DL]:</p> <ul style="list-style-type: none"> • I can explain why spending too much time using technology can sometimes have a negative impact on me; I can give some examples of activities where it is easy to spend a lot of time engaged (e.g. games, films, videos)? • I can explain how using technology can distract me from other things I might do or should be doing. • I can describe ways technology can affect healthy sleep and can describe some of the issues. • I can suggest strategies to help me limit this time. <p>Privacy and Security [DL]:</p> <ul style="list-style-type: none"> • I can create and use strong and secure passwords. • I use different passwords for a range of online services. <p>Copyright and Ownership [DL]:</p> <ul style="list-style-type: none"> • I can give examples of what the problems might be of copying someone else's work from the internet without permission.



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	<ul style="list-style-type: none">• I can explain why I should be careful who I trust online and what information I can trust them with.• I can explain how my and others' feelings can be hurt by what is said or written online.• I can explain why I can take back my trust in someone or something if I feel nervous, uncomfortable or worried.• I can explain what it means to 'know someone' online and why this might be different to knowing <p>Online Reputation [DL]:</p> <ul style="list-style-type: none">• I can search for information about myself online.• I can recognise I need to be careful before I share anything about myself or others online.• I know who I should ask if I am not sure if I should put something online.• I can describe how others can find out information about me by looking online.	<ul style="list-style-type: none">• I can search for information within a wide group of technologies (e.g. social media, image sites, video sites).• I can use key phrases in search engines.• I can analyse information and differentiate between 'opinions', 'beliefs' and 'facts'. I understand what criteria have to be met before something is a 'fact'.• I can describe some of the methods used to encourage people to buy things online (e.g. advertising offers, in-app purchases, pop ups) and recognise some of these when they appear online.• I can use different search technologies.• I can evaluate digital content and explain how I make choices from search results.	<ul style="list-style-type: none">• When searching on the internet for content to use, I can explain why I need to consider who owns it and whether I have the right to reuse it.• I can give some simple examples of why I need to consider who owns information on the internet and whether I have the right to reuse it.
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Computing Long Term Curriculum Map 23-24



Topic	Year 4								
	Self-image and identity [DL]	Online Relationships [DL]	Online Reputation [DL]	Online Bullying [DL]	Safer Internet Day- SMART rules	Managing Online Information [DL]	Health, wellbeing and lifestyle [DL]	Privacy and Security [DL]	Copyright and Ownership [DL]
	Computer Science: Block coding-Scratch/J2Code [CS]			Digital Literacy: Garage band / Isle of Tune to produce digital music. [IT]			Digital Literacy: PowerPoint-Windows [CS]		
Intent	Pupils were introduced to block coding in Year 3 using Scratch/J2Code as part of the computer science aspect of the curriculum where pupils are required to design, write and debug programs that accomplish specific goals. Building on this knowledge pupils will use the Scratch/J2Code software to develop and code a maths game.			This recognises that design and creativity in Computing encompass many forms, including combining software to achieve a goal with a particular audience in mind. In this unit the goal is to create music using different types of software.			Select, use and combine a variety of software (including Internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information		
Local links	Poster competition with local Harrow schools, Online safety focus			Parents and families to join for musical performance workshop			Use PowerPoints for presenting to Parents and local community		
Curriculum link	Maths units on ... to develop a simple educational game. Game designed for Year 1 pupils to practice simple addition and subtraction but could be adapted for a times tables focus to prepare for multiplication check			Music- links with Music and English curriculum including the creation of music to accompany a piece of writing when read aloud, or music to accompany a genre of reading text.			Link PP to curriculum learning, eg creating a presentation on maths times tables facts, or to provide infor on reading genres.		
Knowledge	<ul style="list-style-type: none"> To what makes a good maths game. To know how to develop an educational computer game using selection and repetition. To understand how to use variables. To know how to debug computer programs. To recognise the importance of user interface design, including consideration of input and output. 			<ul style="list-style-type: none"> To know which programs can be used to edit music. To know how to create and develop a musical composition, refining my ideas through reflection and discussion. To understand computer networks including the internet and the opportunities they offer for communication and collaboration. To know how to use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour. 			<ul style="list-style-type: none"> To understand the conventions for collaborative online work, particularly in wikis. To be aware of my responsibilities when editing other people's work. To know about Wikipedia, including potential problems associated with its use. To know how to research and can practise these skills. To know how to write for a target audience using a wiki tool. 		



Computing Long Term Curriculum Map 23-24



			<ul style="list-style-type: none"> To understand computer networks including the internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration.
	<p>Self-image and identity [DL]:</p> <ul style="list-style-type: none"> To understand what is meant by self-image and identity To know what avatar means. To know what is meant by identity. To know something about my identity that is unique to me. <p>Online Relationships [DL]:</p> <ul style="list-style-type: none"> To know how easy it is to find information about people online. To know what information should be shared online. To know that information to be copied, created, edited and shared by others. <p>Online Reputation [DL]:</p> <ul style="list-style-type: none"> To know that information about me can be found online. To know that I need to be careful about what I post online and that I should ask if I am unsure. 	<p>Online Bullying [DL]:</p> <ul style="list-style-type: none"> To know what bullying is. To know how to behave online. To know when bullying can take place online. To know how content I post might affect others, their feelings and how it might affect how others feel about them (their reputation). To know how to get help if I or somebody else faces bullying online. To know how to report concerns both in school and at home about online bullying. <p>Safer Internet Day- SMART rules</p> <ul style="list-style-type: none"> To know how the SMART rules keep me safe online. <p>Managing Online Information [DL]:</p> <ul style="list-style-type: none"> To know what autocomplete is and how to choose the best suggestion. To know that the internet can be used to buy and sell things. To know the difference between a 'belief', an 'opinion' and a 'fact'. To know that some people I 'meet online' (e.g. through social media) may be computer programs pretending to be real people. 	<p>Health, wellbeing and lifestyle [DL]:</p> <ul style="list-style-type: none"> To know the negative impact of spending too much time on technology. To know strategies to help me to control the time I spend on technology. <p>Privacy and Security [DL]:</p> <ul style="list-style-type: none"> To know reasons why I should only share information with people I choose to and can trust. To understand and give reasons why passwords are important. To know that if I'm not sure or I feel pressurised, I should ask a trusted adult. To know strategies for creating and keeping passwords private. To describe how connected devices can collect and share my information with others. To know that others online can pretend to be me or other people including my friends. I can suggest reasons why they might do this. To know what to do if my password is lost or stolen. <p>Copyright and Ownership [DL]:</p> <ul style="list-style-type: none"> To know that when copying someone else's work from the internet without permission, it can cause problems. To know that I must think about who owns the information I see online and whether I am able to use it.
Skills	<p>Block Coding with Scratch/J2Code</p> <ul style="list-style-type: none"> I can design, write and debug programs that accomplish specific goals. I can use sequence, selection, and repetition in programs; work with variables and various forms of input and output. 	<ul style="list-style-type: none"> I can use sequence, selection, and repetition in programs; work with variables and various forms of input and output. I can be discerning in evaluating digital content. I can select, use and combine a variety of software (including internet services) on a 	<ul style="list-style-type: none"> I can solve problems by decomposing them into smaller parts. I can use search technologies effectively. I can use a variety of software (including internet services) to create content including presenting information.



Computing Long Term Curriculum Map 23-24



	<ul style="list-style-type: none"> I can use logical reasoning to explain how some simple algorithms work. I can detect and correct errors in algorithms and programs. 	<p>range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.</p> <ul style="list-style-type: none"> I can develop collaboration skills. I can develop an awareness of how my composition can enhance work in other media. 	<ul style="list-style-type: none"> I can use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. I can collaborate with others. I can proofread to check my work.
	<p>Self-image and identity [DL]:</p> <ul style="list-style-type: none"> I can explain what is meant by the term 'identity'. I can explain how I can represent myself in different ways online. I can explain ways in which and why I might change my identity depending on what I am doing online (e.g. gaming, using an avatar, social media). I can explain how my online identity can be different to the identity I present in 'real life'. I can describe the right decisions about how I interact with others and how others perceive me. <ul style="list-style-type: none"> I can describe issues online that might make me and others feel sad, worried, uncomfortable or frightened. I know and can give examples of how I might get help, both on and offline. <p>Online Relationships [DL]:</p> <ul style="list-style-type: none"> I can describe ways people who have similar likes and interests can get together online. I can give examples of technology-specific forms of communication (e.g. emojis, acronyms, text speak). I can explain some risks of communications online with others I don't know well. I can explain why I should be careful who I trust online and what information I can trust them with. I can explain how my and others' feelings can be hurt by what is said or written online. I can explain why I can take back my trust in someone or something if I feel nervous, uncomfortable or worried. 	<p>Online Bullying [DL]:</p> <ul style="list-style-type: none"> I can explain what bullying is and can describe how people may bully others. I can describe rules about how to behave online and how I follow them. I can identify some online technologies where bullying might take place. I can explain why I need to think carefully about how content I post might affect others, their feelings and how it might affect how others feel about them (their reputation). I can recognise when someone is upset, hurt, or angry online. I can describe how to get help for someone that is being bullied online and assess when I need to do or say something or tell someone. I can identify a range of ways to report concerns both in school and at home about online bullying. <p>Safer Internet Day- SMART rules</p> <ul style="list-style-type: none"> I can explain how the SMART rules keep me safe online and can use them when using the internet at school and at home. <p>Managing Online Information [DL]:</p> <ul style="list-style-type: none"> I can search for information within a wide group of technologies (e.g. social media, image sites, video sites). I can use key phrases in search engines. I can analyse information and differentiate between 'opinions', 'beliefs' and 'facts'. I understand what criteria have to be met before something is a 'fact'. 	<p>Health, wellbeing and lifestyle [DL]:</p> <ul style="list-style-type: none"> I can explain why spending too much time using technology can sometimes have a negative impact on me; I can give some examples of activities where it is easy to spend a lot of time engaged (e.g. games, films, videos)? I can explain how using technology can distract me from other things I might do or should be doing. I can describe ways technology can affect healthy sleep and can describe some of the issues. I can suggest strategies to help me limit this time. <p>Privacy and Security [DL]:</p> <ul style="list-style-type: none"> I can create and use strong and secure passwords. I use different passwords for a range of online services. <p>Copyright and Ownership [DL]:</p> <ul style="list-style-type: none"> I can give examples of what the problems might be of copying someone else's work from the internet without permission. When searching on the internet for content to use, I can explain why I need to consider who owns it and whether I have the right to reuse it. I can give some simple examples of why I need to consider who owns information on the internet and whether I have the right to reuse it.



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	<ul style="list-style-type: none"> I can explain what it means to 'know someone' online and why this might be different to knowing Online Reputation [DL]: <ul style="list-style-type: none"> I can search for information about myself online. I can recognise I need to be careful before I share anything about myself or others online. I know who I should ask if I am not sure if I should put something online. I can describe how others can find out information about me by looking online. 	<ul style="list-style-type: none"> I can describe some of the methods used to encourage people to buy things online (e.g. advertising offers, in-app purchases, pop ups) and recognise some of these when they appear online. I can use different search technologies. I can evaluate digital content and explain how I make choices from search results. 							
Year 5									
Topic	Self-image and identity [DL]	Online Relationships [DL]	Online Reputation [DL]	Online Bullying [DL]	Safer Internet Day- SMART rules	Managing Online Information [DL]	Health, wellbeing and lifestyle [DL]	Privacy and Security [DL]	Copyright and Ownership [DL]
	Understanding computer networks [CS] Coding with Tynker [CS]			Animations [IT]		Coding with Scratch/J2Code [CS] & Code Bugs [CS] Excel Spreadsheets [IT]			
Intent	Understanding computer networks [CS] As part of the computing curriculum pupils will begin to understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration. Coding with Tynker [CS] This term pupils will also cover the computer Science part of the curriculum where pupils are required to design, write and debug programs that accomplish specific goals			The information technology part of the computing curriculum teaches pupils to select, use and combine a variety of software (including Internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.		This is to continue to build on pupil's computer science skills where pupils are required to design, write and debug programs that accomplish specific goals Excel-Spreadsheets [IT] Information technology includes collecting, analysing, evaluating and presenting data and information, teaching pupils how to use spreadsheets can cover these aspects of the curriculum.			
Local links				Animation showcase for parents and local schools					
Curriculum link	Maths-sequencing also learning about 4 quadrants.			English-play scripts		Maths: sequencing and understanding variables			
Knowledge	Understanding computer networks [CS] <ul style="list-style-type: none"> To begin to understand Computer Networks, Internet, Cloud Computing and Bluetooth and how they help us.? 			Animations [IT] Pivot Animation <ul style="list-style-type: none"> To know how to create a series of linked frames. 		Coding [CS] <ul style="list-style-type: none"> To test, debug and edit a program to accomplish a given goal. To create & develop programs, by planning, debugging and applying programming skills of 			



Computing Long Term Curriculum Map 23-24



	<p>Coding [CS] - Tynker</p> <ul style="list-style-type: none"> To know about the use of commands and sequences in an everyday situation, then code using commands and sequences. To know about the use of debugging in an everyday situation, then debug with code. To know about the use of functions and for loops in an everyday situation, then code using functions and for loops. 	<ul style="list-style-type: none"> To make slight changes to an image, using onion skinning. To edit and refine still images to improve my animation. To add a second figure and animate them interacting with each other. To add a background to a Pivot animation <p>Stop Animation</p> <ul style="list-style-type: none"> To know how animation works. To know how storyboard ideas to help to create a good animation. To know how to use an app to create a Stop animation. To know how to showcase and review my animation. 	<p>repetition (loops), selection (IF/ELSE) and variables, to accomplish specific goals.</p> <ul style="list-style-type: none"> To use logical reasoning to deconstruct programs, evaluate their effectiveness and make them more challenging. To modify a game to make it more complex. <p>Excel-Spreadsheets [IT]</p> <ul style="list-style-type: none"> To know how to edit and format a spread sheet To know what a formula in a spreadsheet looks like. To input formulas into a spreadsheet to perform different calculations To make changes to a spreadsheet. To know how to solve a mathematical problem.
	<p>Self-image and identity [DL]:</p> <ul style="list-style-type: none"> To understand what is meant by self-image and identity To know identity online can be copied, modified or altered. To know the media can shape ideas about gender. To know why it is important to reject inappropriate messages about gender online. <p>Online Relationships [DL]:</p> <ul style="list-style-type: none"> To know how to behave respectfully online and make positive contributions. To know that not everyone online acts respectful but this is not my fault. To know how to support others facing difficulties online and can report anything I see online that I don't like. <p>Online Reputation [DL]:</p>	<p>Online Bullying [DL]:</p> <ul style="list-style-type: none"> To know what bullying is. To know when bullying can happening using a range of media (e.g. image, video, text, chat). To know how the content I post might affect others, their feelings and how it might affect how others feel about them (their reputation). To know how to block abusive users. To know how to report online bullying in the apps and platforms I use. To know how to report concerns both in school and at home about online bullying. <p>Safer Internet Day- SMART rules</p> <ul style="list-style-type: none"> To know how the SMART rules keep me safe online. <p>Managing Online Information [DL]:</p> <ul style="list-style-type: none"> To know that not all information online may be true; some may be based on opinions. 	<p>Health, wellbeing and lifestyle [DL]:</p> <ul style="list-style-type: none"> To know that sometimes I might need to limit the amount of time I use technology. To know strategies, tips or advice to promote heathy sleep with regards to technology and to limit the impact of technology on my health. <p>Privacy and Security [DL]:</p> <ul style="list-style-type: none"> To know what a string password is. To know why personal information should be password protected. To know internet use can be monitored. To know the dangers of many of the free apps. To know what to do if my password is lost or stolen. To know to increase privacy on apps and know that the school website has advice for us to use with our parents.



Computing Long Term Curriculum Map 23-24



	<ul style="list-style-type: none"> To know that information about me online can be created, copied or shared by others. To know how information online can be used to make a judgement about an individual. To know how to build a positive online reputation. 	<ul style="list-style-type: none"> To understand the difference between online mis-information (inaccurate information distributed by accident) and dis-information (inaccurate information deliberately distributed and intended to mislead). To know what is meant by 'being skeptical'. To know what is meant by 'hoax'. I can explain why I need to think carefully before I forward anything online. To know how search engines work and how results are selected and ranked. To define the terms 'influence', 'manipulation' and 'persuasion' and explain how I might encounter these online (e.g. advertising and 'ad targeting'). 	<p>Copyright and Ownership [DL]:</p> <ul style="list-style-type: none"> To know that when copying someone else's work from the internet without permission, it can cause problems. When searching on the internet for content to use, I know why I need to consider who owns it and whether I have the right to reuse it. To know methods for referencing other's work when copying it.
Skills	<p>Understanding computer networks [CS]</p> <ul style="list-style-type: none"> I understand what a system is in the real world and how digital systems are made up of Input, Processing and Output. I can recognise a computer Network and I know how they help us. <p>Coding [CS] - Tynker</p> <ul style="list-style-type: none"> I can use of commands and sequences in an everyday situation, then code using commands and sequences. I can debug in an everyday situation, then debug with code. I can use functions and for loops in an everyday situation, then code using functions and for loops. 	<p>Animations [IT]</p> <p>Stop Animation</p> <ul style="list-style-type: none"> I can create a stop animation based on a Shakespeare play we are studying in English I can investigate animation and storyboard ideas. I can plan an animation. I can create an animation based on my storyboard plan. I can share and review my animation. 	<p>Code Bugs [CS]</p> <p style="text-align: center;">Code Bugs (CS)</p> <ul style="list-style-type: none"> I can animate using the Code Bug. I can use inputs on the Code Bug and the selection (IF). I can use several inputs on the Code Bug to produce different outputs. <p>Excel-Spreadsheets [IT]</p> <ul style="list-style-type: none"> To use a spreadsheet to model different options. To make changes to a spreadsheet. To add IF commands to my spreadsheet. To use the skills taught to solve a mathematical problem.
	<p>Self-image and identity [DL]:</p> <ul style="list-style-type: none"> I can explain how identity online can be copied, modified or altered. I can demonstrate reasonable choices about my online identity, depending on context. 	<p>Online Bullying [DL]:</p> <ul style="list-style-type: none"> I can explain what bullying is and can describe how people may bully others 	<p>Health, wellbeing and lifestyle [DL]:</p> <ul style="list-style-type: none"> I can identify times or situations when I might need to limit the amount of time I use technology.



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	<ul style="list-style-type: none"> • I can describe ways in which media can shape ideas about gender. • I can identify messages about gender roles and make judgements based on them. • I can challenge and explain why it is important to reject inappropriate messages about gender online. • I can describe issues online that might make me and others feel sad, worried, uncomfortable or frightened. I know and can give examples of how I might get help, both on and offline. • I can explain why I should keep asking until I get the help I need. <p>Online Relationships [DL]:</p> <ul style="list-style-type: none"> • I can describe strategies for safe and fun experiences in a range of social environments. • I can give examples of how to be respectful to others online. • I can explain that there are some people I communicate with online who may want to do me or my friends harm. I can recognise that this is not my / our fault. • I can make positive contributions and be part of online communities. • I can describe some of the communities in which I am involved and describe how I collaborate with others positively. • I can show that I understand my responsibilities for the well-being of others in my online social group. • I can explain how impulsive and rash communications online may cause problems (e.g. flaming, content produced in live streaming). • I can demonstrate how I would support others (including those who we are having difficulties) online. • I can demonstrate ways of reporting problems online for both myself and my friends. <p>Online Reputation [DL]:</p>	<ul style="list-style-type: none"> • I can describe ways people can be bullied through a range of media (e.g. image, video, text, chat). • I can explain why I need to think carefully about how content I post might affect others, their feelings and how it might affect how others feel about them (their reputation). • I can describe how to get help for someone that is being bullied online and assess when I need to do or say something or tell someone. • I can explain how to block abusive users. • I can explain how I would report online bullying in the apps and platforms I use. • I can describe the helpline services who can support me and what I would say or do if I needed their help (e.g. Childline). • I can describe how to capture bullying content as evidence (e.g. screen grab, URL, profile) to share with others who can help me. • I can identify a range of ways to report concerns both in school and at home about online bullying. <p>Safer Internet Day- SMART rules</p> <ul style="list-style-type: none"> • I can explain how the SMART rules keep me safe online and can use them when using the internet at school and at home. <p>Managing Online Information [DL]:</p> <ul style="list-style-type: none"> • I can explain why lots of people sharing the same opinions or beliefs online does not make these opinions or beliefs true. • I can explain key concepts including; data, information, fact, opinion, belief, true, false, valid, reliable and evidence. • I can give examples of what and why it is important to be 'skeptical'. • I can use search technologies effectively. • I can explain why some information I find online may not be honest, accurate or legal. • I can explain why information that is on a large number of sites may still be inaccurate or 	<ul style="list-style-type: none"> • I can describe some strategies, tips or advice to promote healthy sleep with regards to technology. • I can describe common systems that regulate age-related content (e.g. PEGI, BBFC, parental warnings) and describe their purpose. • I can assess and action different strategies to limit the impact of technology on my health (e.g. nightshift mode, regular breaks, correct posture, sleep, diet and exercise). • I can explain the importance of self-regulating my use of technology; I can demonstrate the strategies I use to do this (e.g. monitoring my time online, avoiding accidents). <p>Privacy and Security [DL]:</p> <ul style="list-style-type: none"> • I can create and use strong and secure passwords. • I use different passwords for a range of online services. • I can describe strategies for keeping my personal information private, depending on contact. • I can describe ways that internet use can be monitored. • I can explain how many free apps or services may read and share my personal information (e.g. friends, contacts, likes, images, videos, voice, messages, geolocation) with others. • I can explain how and why some apps may request or take payment for additional content (e.g. in-app purchases) and explain why I should seek permission from a trusted adult before purchasing. • I can describe effective strategies for managing passwords (e.g. password managers, acronyms, stories). • I can explain what app permissions are and give some examples from the technology and services I use.
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Computing Long Term Curriculum Map 23-24



	<ul style="list-style-type: none">• I can explain ways that some of the information about me online could have been created, copied or shared by others.• I can search for information about an individual online and create a summary report of the information I find.• I can describe ways that information about people online can be used by others to make judgements about an individual.• I can explain how I am developing an online reputation which will allow other people to form an opinion of me.• I can describe some simple ways that help build a positive online reputation.	<p>untrue. I can assess how this might happen (e.g. the sharing of misinformation either by accident or on purpose).</p> <ul style="list-style-type: none">• I can demonstrate the strategies I would apply to be discerning in evaluating digital content.• I can describe how some online information can be opinion and can offer examples.• I can explain how and why some people may present 'opinions' as 'facts'.• I can demonstrate strategies to enable me to analyse and evaluate the validity of 'facts' and I can explain why using these strategies are important.• I can identify, flag and report inappropriate content.	<ul style="list-style-type: none">• I can describe simple ways to increase privacy on apps and services that provide privacy settings.• I can describe ways in which some online content targets people to gain money or information illegally; I can describe strategies to help me identify such content. (e.g. scams, phishing). <p>Copyright and Ownership [DL]:</p> <ul style="list-style-type: none">• I can give examples of content that is permitted to be reused.• I can demonstrate the use of search tools to find and access online content which can be reused by others.• I can demonstrate how to make references to and acknowledge sources I have used from the internet.• I can access and justify when it is acceptable to use the work of others
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Computing Long Term Curriculum Map 23-24



Year 6									
Topic	Self-image and identity [DL]	Online Relationships [DL]	Online Reputation [DL]	Online Bullying [DL]	Safer Internet Day- SMART rules	Managing Online Information [DL]	Health, wellbeing and lifestyle [DL]	Privacy and Security [DL]	Copyright and Ownership [DL]
	Coding-Tynker [CS] Computer Networks [CS]			Animation and Green Screen [IT]			Spreadsheets and Publisher [IT]		
Intent	As part of the computing curriculum pupils need to begin to understand computer networks, including the internet. The computer Science part of the curriculum requires pupils to design, write and debug programs that accomplish specific goals.			The information technology part of the computing curriculum teaches pupils to select, use and combine a variety of software (including Internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information			This information Technology part of the curriculum teaches pupils to use software to collect, present and analyse data appropriately. Pupils will use this software to create content that accomplishes a given goal (e.g. spreadsheet to plan an event, flyer for year 6 presentation)		
Local links	Establish Digital leaders and contribute towards Online Safety newsletter			Create an online safety presentation to be shared with Harrow Schools as part of Online Safety learning.			Create content to be shared with parent community, as part of leaving/moving on celebrations Create publisher documents for end of year leaving memories		
Curriculum link	Maths-sequencing, direction			English- speaking and presentation skills			Maths- formulas for the 4 operations		
Knowledge	Computer Networks <ul style="list-style-type: none"> To understand protocols used when communicating across the internet. To understand the difference between the internet and the World wide web. Coding -[CS] with Tynker <ul style="list-style-type: none"> To know how to code using commands and sequences. To know how to recognise errors in code and debug To know about the use of functions and for loops in an everyday situation, and how to combine sequencing, conditional logic, and loops. 			Animations [IT] & Green Screen [IT] <ul style="list-style-type: none"> To learn about what Green Screen is and when it is used. To know how to use storyboard to organise ideas. To know how to screen record and film the segments of the video that require Green Screen. To know how to use iMovie to put the video together. 			Spreadsheets <ul style="list-style-type: none"> To revise the formulae used in a spreadsheet. To create a spreadsheet using basic formulae. To edit and develop my own spreadsheet. To explore mathematical problems using a spreadsheet. To use a spreadsheet to create a graph. To use a spreadsheet to plan an event Publisher <ul style="list-style-type: none"> To select suitable templates for a flyer or a leaflet. To insert and manipulate text boxes To locate and insert suitable images and text. To evaluate finished product. 		



Computing Long Term Curriculum Map 23-24



	<ul style="list-style-type: none"> I can apply the code I have learnt to design and create a game using loops and conditional statements. <p>Self-image and identity [DL]:</p> <ul style="list-style-type: none"> To understand what is meant by self-image and identity To know identity online can be copied, modified or altered. To know the media can shape ideas about gender. To know why it is important to reject inappropriate messages about gender online. <p>Online Relationships [DL]:</p> <ul style="list-style-type: none"> To know how to behave respectfully online and make positive contributions. To know that not everyone online acts respectful but this is not my fault. To know how to support others facing difficulties online and can report anything I see online that I don't like. <p>Online Reputation [DL]:</p> <ul style="list-style-type: none"> To know that information about me online can be created, copied or shared by others. To know how information online can be used to make a judgement about an individual. To know how to build a positive online reputation. 	<p>Online Bullying [DL]:</p> <ul style="list-style-type: none"> To know what bullying is. To know when bullying can happen using a range of media (e.g. image, video, text, chat). To know how the content I post might affect others, their feelings and how it might affect how others feel about them (their reputation). To know how to block abusive users. To know how to report online bullying in the apps and platforms I use. To know how to report concerns both in school and at home about online bullying. <p>Safer Internet Day- SMART rules</p> <ul style="list-style-type: none"> To know how the SMART rules keep me safe online. <p>Managing Online Information [DL]:</p> <ul style="list-style-type: none"> To know that not all information online may be true; some may be based on opinions. To understand the difference between online mis-information (inaccurate information distributed by accident) and dis-information (inaccurate information deliberately distributed and intended to mislead). To know what is meant by 'being sceptical'. To know what is meant by 'hoax'. I can explain why I need to think carefully before I forward anything online. To know how search engines work and how results are selected and ranked. To define the terms 'influence', 'manipulation' and 'persuasion' and explain how I might encounter these online (e.g. advertising and 'ad targeting'). 	<p>Health, wellbeing and lifestyle [DL]:</p> <ul style="list-style-type: none"> To know that sometimes I might need to limit the amount of time I use technology. To know strategies, tips or advice to promote healthy sleep with regards to technology and to limit the impact of technology on my health. <p>Privacy and Security [DL]:</p> <ul style="list-style-type: none"> To know what a string password is. To know why personal information should be password protected. To know internet use can be monitored. To know the dangers of many of the free apps. To know what to do if my password is lost or stolen. To know to increase privacy on apps and know that the school website has advice for us to use with our parents. <p>Copyright and Ownership [DL]:</p> <ul style="list-style-type: none"> To know that when copying someone else's work from the internet without permission, it can cause problems. When searching on the internet for content to use, I know why I need to consider who owns it and whether I have the right to reuse it. To know methods for referencing other's work when copying it.
<p>Skills</p>	<p>Computer Networks</p> <ul style="list-style-type: none"> I know how information is transferred between systems. 	<p>Green Screen [IT]</p> <ul style="list-style-type: none"> To learn what Green Screen is and when it is used. 	<p>Spreadsheets</p> <ul style="list-style-type: none"> To revise the formulae used in a spreadsheet. To create a spreadsheet using basic formulae.



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	<ul style="list-style-type: none"> • I know what an IP address is? • I am beginning to understand what a DNS (Domain Name Server) does? <p>Coding- [CS]</p> <ul style="list-style-type: none"> • I can compare block code with Java and python script. • I can code using commands and sequences. • I can debug in an everyday situation, then debug with code. • I can use functions and for loops to make my coding more efficient. 	<ul style="list-style-type: none"> • To storyboard ideas for a non-fiction video using Green Screen. • To film the segments of the video that require Green Screen. • To use Clips or iMovie to put the video together. • To evaluate my own and others' work. 	<ul style="list-style-type: none"> • To edit and develop my own spreadsheet. • To explore mathematical problems using a spreadsheet. • To use a spreadsheet to create a graph. • To use a spreadsheet to plan an event <p>Publisher</p> <ul style="list-style-type: none"> • To select suitable templates for a flyer or a leaflet. • To insert and manipulate text boxes • To locate and insert suitable images and text. • To evaluate finished product
	<p>Self-image and identity [DL]:</p> <ul style="list-style-type: none"> • I can explain how identity online can be copied, modified or altered. • I can demonstrate reasonable choices about my online identity, depending on context. • I can describe ways in which media can shape ideas about gender. • I can identify messages about gender roles and make judgements based on them. • I can challenge and explain why it is important to reject inappropriate messages about gender online. • I can describe issues online that might make me and others feel sad, worried, uncomfortable or frightened. I know and can give examples of how I might get help, both on and offline. • I can explain why I should keep asking until I get the help I need. <p>Online Relationships [DL]:</p> <ul style="list-style-type: none"> • I can describe strategies for safe and fun experiences in a range of social environments. • I can give examples of how to be respectful to others online. • I can explain that there are some people I communicate with online who may want to do me or my friends harm. I can recognise that this is not my / our fault. 	<p>Online Bullying [DL]:</p> <ul style="list-style-type: none"> • I can explain what bullying is and can describe how people may bully others • I can describe ways people can be bullied through a range of media (e.g. image, video, text, chat). • I can explain why I need to think carefully about how content I post might affect others, their feelings and how it might affect how others feel about them (their reputation). • I can describe how to get help for someone that is being bullied online and assess when I need to do or say something or tell someone. • I can explain how to block abusive users. • I can explain how I would report online bullying in the apps and platforms I use. • I can describe the helpline services who can support me and what I would say or do if I needed their help (e.g. Childline). • I can describe how to capture bullying content as evidence (e.g. screen grab, URL, profile) to share with others who can help me. • I can identify a range of ways to report concerns both in school and at home about online bullying. <p>Safer Internet Day- SMART rules</p>	<p>Health, wellbeing and lifestyle [DL]:</p> <ul style="list-style-type: none"> • I can identify times or situations when I might need to limit the amount of time I use technology. • I can describe some strategies, tips or advice to promote healthy sleep with regards to technology. • I can describe common systems that regulate age-related content (e.g. PEGI, BBFC, parental warnings) and describe their purpose. • I can assess and action different strategies to limit the impact of technology on my health (e.g. nightshift mode, regular breaks, correct posture, sleep, diet and exercise). • I can explain the importance of self-regulating my use of technology; I can demonstrate the strategies I use to do this (e.g. monitoring my time online, avoiding accidents). <p>Privacy and Security [DL]:</p> <ul style="list-style-type: none"> • I can create and use strong and secure passwords. • I use different passwords for a range of online services. • I can describe strategies for keeping my personal information private, depending on contact.



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	<ul style="list-style-type: none">• I can make positive contributions and be part of online communities.• I can describe some of the communities in which I am involved and describe how I collaborate with others positively.• I can show that I understand my responsibilities for the well-being of others in my online social group.• I can explain how impulsive and rash communications online may cause problems (e.g. flaming, content produced in live streaming).• I can demonstrate how I would support others (including those who we are having difficulties) online.• I can demonstrate ways of reporting problems online for both myself and my friends. <p>Online Reputation [DL]:</p> <ul style="list-style-type: none">• I can explain ways that some of the information about me online could have been created, copied or shared by others.• I can search for information about an individual online and create a summary report of the information I find.• I can describe ways that information about people online can be used by others to make judgements about an individual.• I can explain how I am developing an online reputation which will allow other people to form an opinion of me.• I can describe some simple ways that help build a positive online reputation.	<ul style="list-style-type: none">• I can explain how the SMART rules keep me safe online and can use them when using the internet at school and at home. <p>Managing Online Information [DL]:</p> <ul style="list-style-type: none">• I can explain why lots of people sharing the same opinions or beliefs online does not make these opinions or beliefs true.• I can explain key concepts including; data, information, fact, opinion, belief, true, false, valid, reliable and evidence.• I can give examples of what and why it is important to be 'skeptical'.• I can use search technologies effectively.• I can explain why some information I find online may not be honest, accurate or legal.• I can explain why information that is on a large number of sites may still be inaccurate or untrue. I can assess how this might happen (e.g. the sharing of misinformation either by accident or on purpose).• I can demonstrate the strategies I would apply to be discerning in evaluating digital content.• I can describe how some online information can be opinion and can offer examples.• I can explain how and why some people may present 'opinions' as 'facts'.• I can demonstrate strategies to enable me to analyse and evaluate the validity of 'facts' and I can explain why using these strategies are important.• I can identify, flag and report inappropriate content.	<ul style="list-style-type: none">• I can describe ways that internet use can be monitored.• I can explain how many free apps or services may read and share my personal information (e.g. friends, contacts, likes, images, videos, voice, messages, geolocation) with others.• I can explain how and why some apps may request or take payment for additional content (e.g. in-app purchases) and explain why I should seek permission from a trusted adult before purchasing.• I can describe effective strategies for managing passwords (e.g. password managers, acronyms, stories).• I can explain what app permissions are and give some examples from the technology and services I use.• I can describe simple ways to increase privacy on apps and services that provide privacy settings.• I can describe ways in which some online content targets people to gain money or information illegally; I can describe strategies to help me identify such content. (e.g. scams, phishing). <p>Copyright and Ownership [DL]:</p> <ul style="list-style-type: none">• I can give examples of content that is permitted to be reused.• I can demonstrate the use of search tools to find and access online content which can be reused by others.• I can demonstrate how to make references to and acknowledge sources I have used from the internet.• I can access and justify when it is acceptable to use the work of others
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National Curriculum

KS1



Computing Long Term Curriculum Map 23-24



- understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions
- create and debug simple programs
- use logical reasoning to predict the behaviour of simple programs
- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- recognise common uses of information technology beyond school
- 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

KS2

- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration
- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
- Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concerns about content and contact