



National Curriculum Objectives (Key Stage 1) -

- 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

	Autumn term		Spring term		Summer term	
Year 1	<p>Superheroes (Computer Skills)</p> <ul style="list-style-type: none"> Using digital technologies responsibly access retrieve and use information to support learning Explore and experiment with digital technologies. Begin to understand how [algorithms] are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions . 	<p>Once Upon a time... (Painting)</p> <ul style="list-style-type: none"> Using digital technologies responsibly access retrieve and use information to support learning Explore and experiment with digital technologies. 	<p>Dangerous Deadly Dinosaurs (Word/Pages Processor Skills)</p> <ul style="list-style-type: none"> Explore and experiment with digital technologies. Using digital technologies responsibly access retrieve and use information to support learning 	<p>Rumble in the Jungle (Painting)</p> <ul style="list-style-type: none"> Explore and experiment with digital technologies. Using digital technologies responsibly access retrieve and use information to support learning 	<p>Up, Up and Away (Programming Toys)</p> <ul style="list-style-type: none"> Using digital technologies responsibly access retrieve and use information to support learning Explore and experiment with digital technologies. Understand the instructions of a visual programming language and predict the outcome of a program written using the language. Understand the instructions of a visual programming language and predict the outcome of a program written using the language. 	<p>Ahoy There! (Programming scratch)</p> <ul style="list-style-type: none"> Using digital technologies responsibly access retrieve and use information to support learning Explore and experiment with digital technologies. Understand the instructions of a visual programming language and predict the outcome of a program written using the language.
Online Safety	<p>Self-image & Identity Health Well-being & Lifestyle</p> <ul style="list-style-type: none"> Recognise there are people online who may make them feel sad, embarrassed or upset If something happens that makes them feel sad, worried, uncomfortable or frightened they can give examples of when and how to speak to an adult they can trust Explain /give rules to keep us safe when using technology both in and beyond the home 	<p>Online Relationships</p> <ul style="list-style-type: none"> Use the internet with adult support to communicate with people they know Explain why it is important to be kind and considerate to people online 	<p>Privacy & Security</p> <ul style="list-style-type: none"> Recognise more detailed examples of information that is personal Explain how passwords can be used to protect information and devices Explain why they should ask a trusted adult before sharing information online 	<p>Online Reputation & Online Bullying</p> <ul style="list-style-type: none"> Identify ways that information can be put on the internet Recognise that information can stay online and could be copied Describe what information should not be put online without asking a trusted adult first Describe ways that some people can be unkind online and offer example of how unkind actions can make others feel Describe how to behave online in ways that do not upset others. 	<p>Copyright & Ownership</p> <ul style="list-style-type: none"> Know the work they create belongs to them Name their work so that others know it belongs to them. Explain why work they create using technology belongs to them and say why. Save work under a suitable title/name so that others know it belongs to them Understand that work created by others does not belong to them 	<p>Managing Online Information</p> <ul style="list-style-type: none"> Can talk about how to use the internet as a way of finding information online. Identify devices they could use to access information on the internet. Give simple examples of how to find information. Know/understand that we can encounter a range of things online including things we don't like as well as things which are real or make believe. Know how to get help from a trusted adult if we see content that makes us feel sad, uncomfortable, worried or frightened.





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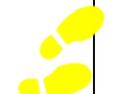
	Autumn term		Spring term		Summer term	
Year 2	An Eye on London (Programming) <ul style="list-style-type: none"> • Develop problem-solving strategies, navigation and co-ordination skills, as I play and learn with electronic games, remote control or programmable toys . • Understand how [algorithms] are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions 	A Knight's Tale (Programming) <ul style="list-style-type: none"> • Develop problem-solving strategies, navigation and co-ordination skills, as I play and learn with electronic games, remote control or programmable toys 	March of the Penguins (Using the Internet) <ul style="list-style-type: none"> • Access, retrieve and use information from electronic sources to support, enrich or extend learning in different contexts. • Explore and experiment with the features and functions of computer technology and use what I learn to support and enhance learning in different contexts. • Develop my knowledge and use of safe and acceptable conduct as I use different technologies to interact and share experiences, ideas and information with others. 	Greenfingers (Computer Art/ Paint) <ul style="list-style-type: none"> • Create, capture and manipulate sounds, text and images to communicate experiences, ideas and information in creative and engaging ways. • Develop an interest, confidence and enjoyment in using drawing and colour techniques, manually or electronically, to represent ideas in different learning situations. • Create a range of visual information through observing and recording from my experiences across the curriculum • Respond to the work of artists and designers by discussing my thoughts and feelings. I can give and accept constructive comment on my own and others' work 	Meerkat Mail (Presentation Skills) <ul style="list-style-type: none"> • Extend and enhance my knowledge of features of various types of software, including those which help find, organise, manage and access information, I can apply what I learn in different situations • Access, retrieve and use information from electronic sources to support, enrich or extend learning in different contexts • Explore and experiment with the features and functions of computer technology and use what I learn to support and enhance my learning in different contexts • Create, capture and manipulate sounds, text and images to communicate experiences, ideas and information in creative and engaging ways. • Develop my knowledge and use of safe and acceptable conduct as I use different technologies to interact and share experiences, ideas and information with others. 	
	Online Safety <ul style="list-style-type: none"> • Self-image & Identity <ul style="list-style-type: none"> • Explain how other people's identity online can be different to their real-life identity. • Give examples of issues online that may make them feel sad, worried, uncomfortable & frightened; give examples of how they may get help • Describe ways in which people may make themselves look different online 	<ul style="list-style-type: none"> • Online Relationships & Healthy-Well-being & Lifestyle <ul style="list-style-type: none"> • Use the internet to communicate with people they don't know well • Give examples of ways they may use technology to communicate with others they don't know well • Can explain simple guidance for using technology in different environments and settings • Say how rules/guides can help 	<ul style="list-style-type: none"> • Privacy & Security <ul style="list-style-type: none"> • Describe how online information can be seen by others • Explain what passwords are and can use passwords for accounts and devices • Explain how many devices in homes can be connected to the internet and list them 	<ul style="list-style-type: none"> • Online Reputation & Online Bullying <ul style="list-style-type: none"> • Explain how information put online about someone can last for a long time. • Can describe how anyone's online information could be seen by others • Know who to talk to if something has been put online without consent or if it is incorrect • Explain what bullying is, how people may bully others and how bullying can make someone feel. • Explain why anyone who experiences bullying is not to blame and how they can get help. 	<ul style="list-style-type: none"> • Copyright & Ownership <ul style="list-style-type: none"> • Recognise that content on the internet may belong to other people. • Describe why other people's work belongs to them. 	<ul style="list-style-type: none"> • Managing Online Information <ul style="list-style-type: none"> • Use simple keyword in search engines • Demonstrate how to navigate a simple webpage to get to information. • Explain what voice activated searching is and how it might be used, and know it is not a real person • Explain the difference between things that are imaginary and things that are real • Explain why some information online may



Our Computing learning journey in Year 3

National Curriculum Objectives (Key Stage 2) -

- 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

	Autumn term		Spring term		Summer term	
Year 3	Walk Like An Egyptian (Internet research and communication) <ul style="list-style-type: none"> • Access, retrieve and use information from electronic sources to support, enrich or extend learning in different contexts • Develop knowledge and use of safe and acceptable conduct as they use different technologies to interact and share experiences, ideas and information with others. • Explore and experiment with the features and functions of computer technology and use what they learn to support and enhance learning in different contexts. • Extend and enhance knowledge of features of various types of software, including those which help find, organise, manage and access information, apply what they learn in different situations 	Passport To The World (Drawing and desktop publishing) <ul style="list-style-type: none"> • 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 purposefully to create, organise, store, manipulate and retrieve digital content 	We Will Rock You (Presentation skills & Programming) <ul style="list-style-type: none"> • 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 • Explore and experiment with digital technologies and can use what they learn to support and enhance my learning in different contexts • Understand the instructions of a visual programming language and predict the outcome of a program written using the language • Understand how computers process information • Demonstrate a range of basic problem solving skills by building simple programs to carry out a given task, using an appropriate language. 		Pride Of The Potteries (Word Processing) <ul style="list-style-type: none"> • Develop knowledge and use of safe and acceptable conduct as I use different technologies to interact and share experiences, ideas and information with others • Access, retrieve and use information from electronic sources to support, enrich or extend learning in different contexts • Create, capture and manipulate sounds, text and images to communicate experiences, ideas and information in creative and engaging ways 	
	Self-image & Identity Healthy Well-being & Lifestyle <ul style="list-style-type: none"> • Explain what is meant by the term 'identity' • Explain how they can represent themselves in different ways online • Explain ways in which they may change their identity depending on what they are doing online (e.g. gaming; using an avatar; social media) • Explain why spending too much time using technology can sometimes have a negative impact on them. Give examples of activities where it is easy to spent a lot of time engaged. 	Online Relationships <ul style="list-style-type: none"> • Describe ways people who have similar likes and interests can get together online • Give examples of technology-specific forms of communications • Explain some risks of communicating online with others they don't know well • Explain why they should be careful who they trust online and what information they trust them with • Explain how feelings can be hurt by what is said or written online • Explain why they can take back trust in someone or something if they feel nervous, uncomfortable or worried. • Explain what it means to 'know someone' online and why this might be different form knowing someone in real life. • Explain what is meant by 'trusting someone online'. Explain why this is different from 'liking someone online' 	Privacy & Security <ul style="list-style-type: none"> • Give reasons why they should only share information with people they choose and can trust. Explain that if they feel pressure they should ask a trusted adult. • Understand and can give reasons why passwords are important • Describe how connected devices can collect and share information with others • Describe simple strategies for creating and keeping passwords private. 	Online Reputation & Online Bullying <ul style="list-style-type: none"> • Explain how to search for information about others online • Give examples of what anyone may or may not be willing to share about themselves online. Explain the need to be careful before sharing anything personal. • Explain who someone can ask if they are unsure about putting something online. • Describe appropriate ways to behave towards other people online and why this is important. • Give examples of how bullying behaviour could appear online and how someone can get support. 	Copyright & Ownership <ul style="list-style-type: none"> • Explain why copying someone else's work from the internet without permission isn't fair and can explain what problems this might cause. 	Managing Online Information <ul style="list-style-type: none"> • Demonstrate how to use key phrases in search engines to gather accurate information online. • Explain what autocomplete is and how to choose the best suggestion. • Explain how the internet can be used to sell and buy things. • Explain the different between a 'belief', an 'opinion' and a 'fact' and give example of where they might be shared online. • Explain that not all opinions shared may be accepted as true or fair by others. • Describe and demonstrate how we can get help form a trusted adult if we see content that makes us feel sad 



Our Computing learning journey in Year 4

- National Curriculum Objectives (Key Stage 2) -**
- 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

	Autumn term	Spring term	Summer term		
Year 4	<p>Roman Raiders (word processing)</p> <ul style="list-style-type: none"> Select, use and combine a variety of software on a range of digital devices to design a range of programs, systems and content that accomplish specific goals. Create, capture and manipulate sounds, text and images to communicate experiences, ideas and information in creative and engaging way. 	<p>Monster Mysteries (animation)</p> <ul style="list-style-type: none"> Explore current news items about technological interests, raise questions on the issues and express thoughts. Investigate how an everyday product has changed over time to gain an awareness of the link between scientific and technological developments Create, capture and manipulate sounds, text and images to communicate experiences, ideas and information in creative and engaging way 	<p>Three Cheers for Chocolate (programming)</p> <ul style="list-style-type: none"> Use appropriate software, to work collaboratively to design an interesting and entertaining game which incorporates a form of control technology or interactive multimedia 	<p>The Iron giant (scratch questions & quizzes)</p> <ul style="list-style-type: none"> Extend and enhance knowledge of digital technologies to collect, analyse ideas, relevant information and organise these in an appropriate way. Understand the operation of a process and its outcome and structure related items of information. Explain core programming language concepts in appropriate technical language. Understand how information is stored and how key components of computing technology connect and interact through networks. Create, develop and evaluate computing solutions in response to a design challenge 	
	<p>Self-image & Identity</p> <ul style="list-style-type: none"> Explain how their online identity can be different to the identity they present in 'real life' Knowing this, can describe the right decisions about how they interact with others and how others perceive them 	<p>Online Relationships Health, well-being and lifestyle</p> <ul style="list-style-type: none"> Describe strategies for safe and fun experiences in a range of online social environments I can give examples of how to be respectful to others online Explain how using technology can distract them for other things they might do or should be doing Identify times or situations when they may need to limit the amount of time they use technology Suggest strategies to help them limit this time 	<p>Privacy & Security</p> <ul style="list-style-type: none"> I can explain what a strong password is Explain that others online can pretend to be them or other people, including their friends. Explain how internet use can be monitored Describe strategies for keeping their personal information private, depending on context Suggest reasons why they might keep personal information private 	<p>Online Reputation & Online Bullying</p> <ul style="list-style-type: none"> Describe how to find out information about others by searching online. Explain ways that some of the information about anyone online could have been created, copied or shared by others. Recognise when someone is upset, hurt or angry online. Describe ways people can be bullied through a range of media. Explain why people need to think carefully about how content they post might affect others 	<p>Copyright & Ownership</p> <ul style="list-style-type: none"> When searching on the internet for content to use explain why they need to consider who owns it and whether they have the right to reuse it. Give some examples of content which they must not use without permission from the owner

Online Safety





Our Computing learning journey in Year 5

National Curriculum Objectives (Key Stage 2) -

- 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

	Autumn term		Spring term		Summer term	
Year 5	<p>To Infinity and Beyond (spreadsheets)</p> <ul style="list-style-type: none"> Extend and enhance knowledge of features of various types of software, including those which help find, organise, manage and access information, and apply what I learn in different situations. Explore and experiment with the features and functions of computer technology to support and enhance learning in different contexts Carry out investigations and surveys, devising and using a variety of methods to gather information and work with others to collate, organise and communicate the results in an appropriate way Display data in a clear way using a suitable scale, by choosing appropriately from an extended range of tables, charts, diagrams and graphs, making effective use of technology 	<p>Smashing Saxons (Developing games)</p> <ul style="list-style-type: none"> Extend and enhance my knowledge of digital technologies to collect, analyse ideas, relevant information and organise these in an appropriate way Understand the operation of a process and its outcome and structure related items of information Explain core programming language concepts in appropriate technical language. Create, develop and evaluate computing solutions in response to a design challenge 	<p>Groovy Greeks (internet research & webpage design)</p> <ul style="list-style-type: none"> 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 		<p>Amazing Americans (radio)</p> <ul style="list-style-type: none"> Select, use and combine a variety of software on a range of digital devices to create content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information 	
	<p>Self-image & Identity Health, well-being and lifestyle</p> <ul style="list-style-type: none"> Explain how identity online can be copied, modified or altered. Can demonstrate responsible choices about their online identity, depending on context. Describe ways technology can affect healthy sleep and can describe some of the issues Describe some strategies, tips or advice to promote healthy sleep with regards to technology 	<p>Online Relationships</p> <ul style="list-style-type: none"> Explain that there are some people they can communicate with online who may want to do harm. They can recognize that this is not their fault. Make positive contributions and be part of online communities Describe some of the communities in which they are involved and describe how they collaboratively with others positively. 	<p>Privacy & Security</p> <ul style="list-style-type: none"> Create and use strong and secure passwords Explain how many free apps or services may read and share private information with others Explain how and why some apps may request or take payment for additional content and explain why they should seek permission from a trusted adult before purchasing. 	<p>Online Reputation & Online Bullying</p> <ul style="list-style-type: none"> Can search for information about an individual online and summaries information found. Describe ways that information about anyone online can be used by others to make judgement about an individual and why these may be incorrect. Recognise online bullying can be different to physical bullying. Describe how what one person perceives as joking might be experiences by others as bullying. Explain how anyone can get help if they are being bullied online and identify a range of ways to report concerns and access support both in school and at home. Explain how to block abusive users Describe the helpline services which can help people experiencing bullying, and how to access them (e.g. childline or The Mix). 	<p>Copyright & Ownership</p> <ul style="list-style-type: none"> Assess and justify when it is acceptable to use the work of others. Give examples of content that is permitted to be re-used and know how this content can be found online. 	<p>Managing Online Information</p> <ul style="list-style-type: none"> Explain the benefits and limitations of using different types of search technologies. Explain what is meant by being sceptical. Evaluate digital content and can explain how to make choices about what is trustworthy Explain key concepts including: information, reviews, fact, opinion, belief, validity, reliability and evidence Identify ways the internet can draw us to information for different agendas e.g. pop-ups, targeted ads 



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Year 6	<p>Vicious Vikings (animated stories)</p> <ul style="list-style-type: none"> • Extend and enhance knowledge of digital technologies to collect, analyse ideas, relevant information and organise these in an appropriate way. • Understand the operation of a process and its outcome and structure related items of information • Explain core programming language concepts in appropriate technical language. • Create, develop and evaluate computing solutions in response to a design challenge. 	<p>Treasure Island (animated stories)</p> <ul style="list-style-type: none"> • Extend and enhance my knowledge of digital technologies to collect, analyse ideas, relevant information and organise these in an appropriate way. • Understand the operation of a process and its outcome and structure related items of information • Explain core programming language concepts in appropriate technical language. • Create, develop and evaluate computing solutions in response to a design challenge. 	<p>Blitz Brits (Film making)</p> <ul style="list-style-type: none"> • Extend and enhance knowledge of features of various types of software, including those which help find, organise, manage and access information. Apply learning in different situations. • Explore and experiment with the features and functions of computer technology and use what I learn to support and enhance my learning in different contexts • Create, capture and manipulate sounds, text and images to communicate experiences, ideas and information in creative and engaging ways. • Use search facilities of electronic sources to access and retrieve information, recognising the importance this has in my place of learning, at home and in the workplace. 		<p>Iceberg Right Ahead (Programming)</p> <ul style="list-style-type: none"> • Using appropriate software, work collaboratively to design an interesting and entertaining game which incorporates a form of control technology or interactive multimedia. 	
	<p>Self-image & Identity</p> <ul style="list-style-type: none"> • Describe ways in which media can shape ideas about gender • Describe issues online that might make people feel sad, worried, uncomfortable or frightened. Know and can give examples of how they might get help both on and offline • Identify message about gender roles and make judgments based on them • Challenge and explain why it is important to reject inappropriate messages about gender online • Explain why they should not be afraid to keep asking until they get the help they need 	<p>Online Relationships Healthy, well-being and lifestyle</p> <ul style="list-style-type: none"> • Show they understand their responsibilities for the well-being of others in their online social group • Explain how impulsive and rash communications online may cause problems • Demonstrate how they would support others online • Demonstrate ways of reporting problems online for themselves and their friends. • Describe common systems that regulate age-related content and describe their purpose • Assess and action different strategies to limit the impact of technology on their health. • Explain the importance of self-regulating the use of technology 	<p>Privacy & Security</p> <ul style="list-style-type: none"> • Use different passwords for a range of online services • Explain what app permission are and can give some examples from the technology or services they use • Describe effective strategies for managing those passwords • Know what to do if a password is lost or stolen • Describe simple ways to increase privacy on apps and services that provide privacy settings • Describe ways in which some online content targets people to gain money or information illegally. • Describe strategies to help them identify such content (e.g. scams, phishing) 	<p>Online Reputation & Online Bullying</p> <ul style="list-style-type: none"> • Explain the ways in which anyone online can develop a positive online reputation • Explain strategies anyone can use to protect their 'digital personality' and online reputation, including degrees of anonymity. • Describe how to capture bullying content as evidence (e.g screen-grab. URL, profile) to share with others who can help. • Explain how someone would report online bullying in different contexts. 	<p>Copyright & Ownership</p> <ul style="list-style-type: none"> • Demonstrate the use of search tools to find and access online content which can be reused by others. • Demonstrate how to make references to and acknowledge sources they have used from the internet. 	<p>Managing Online Information</p> <ul style="list-style-type: none"> • Explain how search engines work and how results are elected and ranked. • Explain how to use search technologies effectively. • Explain how and why some people may present 'opinions' as 'facts', why the popularity of an opinion of the personalities of those promoting it does not necessarily make it true, fair or perhaps even legal. • Define the terms 'influence', 'manipulation' and 'persuasion' and explain how someone might encounter these online. • Understand the concept of persuasive design and how it can be used to influence peoples' choices 