



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 (Technology Around Us)</p> <p>Learners will develop their understanding of technology and how it can help them in their everyday lives. They will start to become familiar with the different components of a computer by developing their keyboard skills. Learners will also consider how to use technology responsibly.</p> <ul style="list-style-type: none"> • 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 	<p>Once Upon a time... (Digital Painting)</p> <p>Learners will develop their understanding of a range of tools used for digital painting. They then use these tools to create their own digital paintings, while gaining inspiration from a range of artists' work. Learners will consider their preferences when painting with and without the use of digital devices.</p> <ul style="list-style-type: none"> • use technology purposefully to create, organise, store, manipulate and retrieve digital content 	<p>Dangerous Deadly Dinosaurs (Coding—sequencing, loops & events)</p> <p>Learn to program using commands like loops and events. Learners will meaningfully collaborate with others, investigate different problem-solving techniques, persist in the face of challenging tasks and learn about internet safety</p> <ul style="list-style-type: none"> • 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 	<p>Rumble in the Jungle (Coding—sequencing, loops & events)</p> <p>Learn to program using commands like loops and events. Learners will meaningfully collaborate with others, investigate different problem-solving techniques, persist in the face of challenging tasks and learn about internet safety</p> <ul style="list-style-type: none"> • 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 	<p>Up, Up and Away (Grouping Data)</p> <p>Learners will understand how labelling, grouping and searching are important aspects of data and information. Learners will understand that searching is a common operation in many applications, and requires an understanding that to search data, it must have labels. This unit will focus on assigning data (images) with different labels in order to demonstrate how computers are able to group and present data.</p> <ul style="list-style-type: none"> • 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 	<p>Ahoy There! (Digital Writing)</p> <p>Learners will develop their understanding of the various aspects of using a computer to create and manipulate text. They will become more familiar with using a keyboard to enter and remove text. Learners will also consider how to change the look of their text, and will be able to justify their reasoning in making these changes. Finally, learners will consider the differences between using a computer to create text, and writing text on paper. They will be able to explain which method they prefer and explain their reasoning for choosing this.</p> <ul style="list-style-type: none"> • 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
	Online Safety	<p>Copyright & Ownership</p> <p>Health Well-being & Lifestyle</p> <ul style="list-style-type: none"> • Identifying rules that help keep us safe and healthy in and beyond the home when using technology (give some simple examples) • Understand that the work the learners create belongs to them • Name their work so that others know it belongs 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. 	<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. 	<p>Copyright & Ownership</p> <ul style="list-style-type: none"> • I know that work I create belongs to me • I can name my work so that others know it belongs to me 	<p>Privacy & Security</p> <ul style="list-style-type: none"> • I can give reasons why I should only share information with people I choose to and can trust





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	Autumn term		Spring term		Summer term
Year 2	<p>An Eye on London (Information Technology Around Us)</p> <p>Learners will develop their understanding of what IT is and will begin to identify examples. They will discuss where they have seen IT in school and beyond, in settings such as hospitals and libraries. Learners will then investigate how IT improves our world, and they will learn about the importance of using IT responsibly.</p> <ul style="list-style-type: none"> • 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 	<p>A Knight's Tale (Digital Photography)</p> <p>Learners will learn to recognise that different devices can be used to capture photographs and will gain experience capturing, editing and improving photos. Finally they will use this knowledge to recognise that images they see may not be real.</p> <ul style="list-style-type: none"> • 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 	<p>March of the Penguins (Coding—sequencing, loops, impacts of computing & events)</p> <p>Learners will learn more sophisticated unplugged activities and work through a greater variety of puzzles. Learners will learn the basics of programming, collaboration techniques, investigation and critical thinking skills, persistence in the face of difficulty and internet safety</p> <ul style="list-style-type: none"> • 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 	<p>Greenfingers (Coding—sequencing, loops, impacts of computing & events)</p> <p>Learners will learn more sophisticated unplugged activities and work through a greater variety of puzzles. Learners will learn the basics of programming, collaboration techniques, investigation and critical thinking skills, persistence in the face of difficulty and internet safety</p> <ul style="list-style-type: none"> • 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 	<p>Meerkat Mail (Pictograms & Making Music)</p> <p>Pictograms—Learners will begin to understand what the term data means and how data can be collected in the form of a tally chart. They will learn the term 'attribute' and use this to help them organise data. They will then progress onto presenting data in the form of pictograms and finally block diagram. Learners will use the data presented to answer questions.</p> <p>Making Music—Learners will be using a device to create music. They will listen to a variety of pieces of music and consider how music can make them think and feel. Learners will compare creating music digitally and non-digitally. Learners will look at patterns and purposefully create music</p> <ul style="list-style-type: none"> • use technology purposefully to create, organise, store, manipulate and retrieve digital content • 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
	<p>Online Safety</p> <p>Healthy well-being & lifestyle</p> <ul style="list-style-type: none"> • I can identify rules that help keep us safe and healthy in and beyond the home when using technology • I can give some simple examples 	<p>Managing Online Information</p> <ul style="list-style-type: none"> • I can identify that some images are not real (fake) 	<p>Online Reputation & Online Bullying</p> <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. 	<p>Online Reputation & Online Bullying</p> <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. 	<p>Copyright & Ownership</p> <ul style="list-style-type: none"> • I know that work I create belongs to me



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	<p>Walk Like An Egyptian (Connecting Computers)</p> <p>Learners will develop their understanding of digital devices, with an initial focus on inputs, processes and outputs. They will also compare digital and on-digital devices. Ext, learners will be introduced to computer networks, including devices that make up a network's infrastructure, such as wireless access points and switched. Finally, learners will discover the benefits of connecting devices in a network</p> <ul style="list-style-type: none"> • <i>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</i> • <i>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</i> • <i>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</i> 	<p>Passport To The World (Stop-frame Animation)</p> <p>Learners will use a range of techniques to create a stop-frame animation using tablets. Ext, they will apply those skills to create a story-based animation. This unit will conclude with learners adding other types of media to their animation, such as music and text.</p> <ul style="list-style-type: none"> • <i>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</i> • <i>use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</i> 	<p>We Will Rock You (Coding— sequencing, binary, loops, events & data)</p> <p>Learners will create programs with sequencing, loops, and events. They will investigate problem-solving techniques and develop strategies for building positive communities both online and offline. By the end of the unit learners will create interactive games that they can share</p> <ul style="list-style-type: none"> • <i>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</i> • <i>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</i> • <i>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</i> 	<p>Pride Of The Potteries (Branching Databases & Desktop Publishing)</p> <p>Branching Databases—During this unit, learners will develop their understanding of what a branching database is and how to create one. They will gain an understanding of what attributes are and how to use them to sort groups of objects by using yes/no questions. The learners will create physical and on-screen branching databases. Finally, they will evaluate the effectiveness of branching databases and will decide what types of data should be presented as a branching database.</p> <p>Desktop Publishing—Learners will become familiar with the terms 'text' and 'images' and understand that they can be used to communicate messages. They will use desktop publishing software and consider careful choices of font size, colour and type to edit and improve premade documents. Learners will be introduced to the terms 'templates, 'orientation' and 'placeholders' and begin to understand how these can support them in making their own template for a magazine front covers. They will start to add text and images to create their own pieces of work using desktop publishing software. Learners will look at a range of page layouts thinking carefully about the purpose of these and evaluate how and why desktop publishing is used in the real world.</p> <ul style="list-style-type: none"> • <i>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</i> • <i>use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</i>
	Online Safety	<p>Managing Online Information & Copyright and Ownership</p> <ul style="list-style-type: none"> • I can use key phrases I search engines • I can use search technologies effectively • I can explain why copying someone else's work from the internet without permission can cause problems • I can give examples of what those problems might be • 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 • I can give some 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. 	<p>Online Bullying</p> <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. 	<p>Copyright & Ownership</p> <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 demonstrate the use of search tools to find and access online content which can be reused by others



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 (The internet & Audio Editing)</p> <p>The internet—Learners will apply their knowledge and understanding of networks, to appreciate the internet as a network of networks which need to be kept secure. They will learn that the World Wide Web is part of the internet, and will be given opportunities to explore the World Wide Web for themselves in order to learn about who owns content and what they can access, add, and create. Finally, they will evaluate online content to decide how honest, accurate, or reliable it is, and understand the consequences of false information</p> <p>Audio Editing—In this unit, learners will initially examine devices capable of recording digital audio, which will include identifying the input device and output devices. Learners will discuss the ownership of digital audio and the copyright implications of duplicating the work of others. In order to record audio themselves, learners will use Audacity to produce a podcast, which will include editing their work, adding multiple tracks, and opening and saving the audio files. Finally, learners will evaluate their work and give feedback to their peers.</p> <ul style="list-style-type: none"> • <i>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</i> • <i>use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</i> • <i>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</i> • <i>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</i> 	<p>Monster Mysteries (Coding—sequencing, events, loops, conditionals & binary)</p> <p>Learners will develop their understanding of algorithms, nested loops, while loops, conditionals and more</p> <ul style="list-style-type: none"> • <i>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</i> • <i>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</i> 	<p>Three Cheers for Chocolate (Data Logging)</p> <p>In this unit, pupils will consider how and why data is collected over time. Pupils will consider the senses that humans use to experience the environment and how computers can use special input devices called sensors to monitor the environment. Pupils will collect data as well as access data captured over long periods of time. They will look at data points, data sets, and logging intervals. Pupils will spend time using a computer to review and analyse data. Towards the end of the unit, pupils will pose questions and then use data loggers to automatically collect the data needed to answer those questions.</p> <ul style="list-style-type: none"> • <i>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</i> 	<p>The Iron giant (photo editing)</p> <p>In this unit, learners will develop their understanding of how digital images can be changed and edited, and how they can then be resaved and reused. They will consider the impact that editing images can have, and evaluate the effectiveness of their choices.</p> <ul style="list-style-type: none"> • <i>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</i> • <i>use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</i> • <i>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</i>
	<p>Online Safety</p> <p>Managing Online Information</p> <ul style="list-style-type: none"> • I can analyse information to make a judgement about probable accuracy, and I understand why it is important to make my own decisions regarding content and that my decisions are respected by others. • I can explain what is meant by fake news, e.g. why some people will create stories or alter photographs and put them online to pretend something is true when it isn't. • I can describe ways of identifying when online content has been commercially sponsored or boosted, (e.g. by commercial companies or by vloggers, content creators, or influencers). • I can describe how fake news may affect someone's emotions and behaviour, and explain why this may be harmful. <p>Copyright & Ownership</p> <ul style="list-style-type: none"> • I can explain why copying someone else's work from the internet without permission can cause problems • I can give examples of what those problems might be • 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 	<p>Privacy & Security</p> <ul style="list-style-type: none"> • Create and use strong and secure passwords 		<p>Self Image & Identity</p> <ul style="list-style-type: none"> • I can describe ways in which people might make themselves look different online. <p>Copyright & Ownership</p> <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.



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- *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(Sharing Information)</p> <p>In this unit, learners will develop their understanding of computer systems and how information is transferred between systems and devices. Learners will consider small-scale systems as well as large-scale systems. They will explain the input, output, and process aspects of a variety of different real-world systems. Learners will also take part in a collaborative online project with other class members and develop their skills in working together online.</p> <ul style="list-style-type: none"> • <i>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</i> • <i>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</i> • <i>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</i> • <i>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</i> • <i>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</i> 	<p>Smashing Saxons (Video Editing)</p> <p>This unit gives learners the opportunity to learn how to create short videos in groups. As they progress through this unit, they will be exposed to topic-based language and develop the skills of capturing, editing, and manipulating video. Active learning is encouraged through guided questions and by working in small groups to investigate the use of devices and software. Learners are guided with step-by-step support to take their idea from conception to completion. The use of green screen can be incorporated into this unit. At the conclusion of the unit, learners have the opportunity to reflect on and assess their progress in creating a video.</p> <ul style="list-style-type: none"> • <i>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</i> • <i>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</i> • <i>Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</i> 	<p>Groovy Greeks (Coding—sequencing, sprites, nested loops, functions & impacts of computing)</p> <p>Students will learn to make fun, interactive projects that reinforce what they'll learn about online safety. Following these lessons, students will engage in more complex coding. Students will learn about nested loops, functions, and conditionals.</p> <ul style="list-style-type: none"> • <i>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</i> • <i>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</i> • <i>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</i> 	<p>Amazing Americans (Flat-file Databases & Vector Drawing)</p> <p>Flat-file databases - This unit looks at how a flat-file database can be used to organise data in records. Pupils use tools within a database to order and answer questions about data. They create graphs and charts from their data to help solve problems. They use a real-life database to answer a question, and present their work to others.</p> <ul style="list-style-type: none"> • <i>use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</i> • <i>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</i> <p>Vector Drawing— In this unit learners will find out that vector images are made up of shapes. They will learn how to use the different drawing tools and how images are created in layers. They will explore the ways in which images can be grouped and duplicated to support them in creating more complex pieces of work.</p> <ul style="list-style-type: none"> • <i>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.</i>
	<p>Online Safety</p> <ul style="list-style-type: none"> • I can assess and justify when it is acceptable to use the work of others • I can give examples of content that is permitted to be reused 		<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>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 reused and know how this content can be found online.



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- *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 6	<p>Vicious Vikings (Internet Communication)</p> <p>In this unit, the class will learn about the World Wide Web as a communication tool. First, they will learn how we find information on the World Wide Web, through learning how search engines work (including how they select and rank results) and what influences searching, and through comparing different search engines. They will then investigate different methods of communication, before focusing on internet-based communication. Finally, they will evaluate which methods of internet communication to use for particular purposes.</p> <ul style="list-style-type: none"> • <i>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</i> • <i>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</i> • <i>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</i> • <i>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</i> • <i>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</i> 	<p>Treasure Island (Webpage Creation)</p> <p>This unit introduces learners to the creation of websites for a chosen purpose. Learners identify what makes a good web page and use this information to design and evaluate their own website using Google Sites. Throughout the process learners pay specific attention to copyright and fair use of media, the aesthetics of the site, and navigation paths.</p> <ul style="list-style-type: none"> • <i>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</i> • <i>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.</i> • <i>use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour.</i> 	<p>Blitz Brits (Coding—sequencing, variables, data, loops & sprites)</p> <p>The course begins by looking at how users make choices in the apps they use. Students then learn to make a variety of Sprite Lab apps that also offer choices for the user. In the later lessons in the course, students will learn more advanced concepts, including variables and “for” loops.</p> <ul style="list-style-type: none"> • <i>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</i> • <i>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</i> • <i>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</i> 	<p>Iceberg Right Ahead (Introduction to spreadsheets & 3D Modelling)</p> <p>Spreadsheets—This unit introduces the learners to spreadsheets. They will be supported in organising data into columns and rows to create their own data set. Learners will be taught the importance of formatting data to support calculations, while also being introduced to formulas and will begin to understand how they can be used to produce calculated data. Learners will be taught how to apply formulas that include a range of cells, and apply formulas to multiple cells by duplicating them. Learners will use spreadsheets to plan an event and answer questions. Finally, learners will create graphs and charts, and evaluate their results in comparison to questions asked.</p> <ul style="list-style-type: none"> • <i>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</i> <p>3D Modelling—During this unit, learners will develop their knowledge and understanding of using a computer to produce 3D models. Learners will initially familiarise themselves with working in a 3D space, including combining 3D objects to make a house and examining the differences between working digitally with 2D and 3D graphics. Learners will progress to making accurate 3D models of physical objects, such as a pencil holder, which include using 3D objects as placeholders. Finally, learners will examine the need to group 3D objects, then go on to plan, develop, and evaluate their own 3D model of a photo frame.</p> <ul style="list-style-type: none"> • <i>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</i> • <i>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</i>
	Online Safety	<p>Managing Online Information</p> <ul style="list-style-type: none"> • I can describe and assess the benefits and the potential risks of sharing information online. • I can use various additional tools to refine my searches (e.g. search filters: size, type, usage rights etc.). • I can explain how to use search effectively and use examples from my own practice to illustrate this. • I can explain how search engine rankings are returned and can explain how they can be influenced (e.g. commerce, sponsored results). 	<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>Privacy & Security</p> <ul style="list-style-type: none"> • I can describe strategies for keeping my personal information private, depending on context
	<p>Online relationships</p> <ul style="list-style-type: none"> • I can use the internet with adult support to communicate with people I know. <p>Managing information online</p> <ul style="list-style-type: none"> • I can navigate online content, websites, or social media feeds using more sophisticated tools to get to the information I want (e.g. menus, sitemaps, breadcrumb-trails, site search functions). <p>Copyright and ownership</p> <ul style="list-style-type: none"> • I can explain why copying someone else’s work from the internet without permission can cause problems. • I can give examples of what those problems might be. • 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. • I can assess and justify when it is acceptable to use the work of others. • 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 explain the principles of fair use and apply this to case studies 		<p>Managing Online Information</p> <ul style="list-style-type: none"> • I can describe how I can search for information within a wide group of technologies (e.g. social media, image sites, video sites) • I can use different search technologies • I can evaluate digital content and can explain how I make choices from search results 	

