

Computing

Vision – ‘all things are possible’

At Benedict Biscop we want our children to learn that all things are possible. We want our children to aspire and to achieve highly. We want our children to develop as **IT professionals or Computer Scientists**, developing knowledge and skills through the core element of computing which are computer science, information technology and digital literacy.

Characteristics:

- **A love of technology** and **understand a variety of technology** that can be used for a range of different purposes.
- To be **patience** and be able to **problem solve** to ensure that the **technology is working correctly and effectively**.
- To be **resilient** and continue to correct and develop the way technology is used.
- To be able to **problem solve** and find a solution to problems when using technology.
- To **think logically** and **work methodically** to solving problems with technology.
- To work **collaboratively** with other people, **in person and online**, to ensure that problems are solved.
- To be **creative** and use a range of different software and programs to enhance and develop their work.
- To **use and apply computational thinking** to the core elements of computing

At Benedict Biscop, we actively encourage cross-curricular learning, to give pupils maximum opportunity to transfer skills and knowledge. Within Computing, we want children to understand elements of computer science, information technology and digital literacy which are taught both explicitly as a ‘stand-alone’ sequence of lessons or through transferable skills taught and then applied in cross-curricular lessons. The Computing curriculum is separated into four strands: understanding and creating algorithms; digital content and the internet; understanding the application of IT; and online safety and appropriate use. Each area of Computing focus on one or more of the core elements of computing. As technology is continuing to become a huge part in everyday life, we want to ensure children have the appropriate and suitable skills and knowledge for the future workplace, and grow and develop into active participants in the digital world. We want our children to use computational thinking and creativity to understand and change the world through collaboration, as well as making links to industry.

National Curriculum Aims:

- Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data

representation

- Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- Are responsible, competent, confident and creative users of information and communication technology.

Early Years Foundation Stage Computing looks at:

- Begin to understand what algorithms are through the following and giving of instructions, begin to explore how algorithms are implemented as programs on digital devices
- Begin to use technology independently and/or with support to purposefully create, organise, store, manipulate and retrieve digital content
- Begin to recognise common uses of information technology within school and beyond
- Begin to use understand how to use technology safely and respectfully with/without support, keeping personal information private; understanding where to go for help and support when they have concerns about content or contact on the internet or other online technologies

Key Stage 1 Computing looks at:

- 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

Key Stage 2 Computing looks at:

- 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

PROGRESSION

To meet our curriculum aims, we have identified core strands of learning [generic learning units] which run throughout our curriculum. We have identified what this should look like at the end of key phases within the school [key skills demonstrated].

The curriculum is taught in a spiral design where learning is revisited and embedded – deepening learning and developing Mastery.

Key generic learning objectives	EYFS working at the EXPECTED STANDARD	EYFS working ABOVE the expected standard	KS1 working at the EXPECTED STANDARD	KS1 working ABOVE the expected standard	Lower KS2 working at the EXPECTED STANDARD	Lower KS2 working ABOVE the expected standard	Upper KS2 working at the EXPECTED STANDARD	Lower KS2 working ABOVE the expected standard
Understanding and Creating Algorithms	Bee Bot	Bee Bot	Bee Bot Daisy the Dinosaur	Daisy the Dinosaur Scratch Jr	Scratch Jr	Scratch Jr	Hopscotch	Hopscotch Swift
	<p>To understand how to make a floor robot move</p> <p>To follow instructions from a friend or familiar adult</p> <p>To begin to describe what actions I need to do for something to happen using hardware</p>	<p>To understand how to make a floor robot move and begin to give simple instructions</p> <p>To follow instructions from unfamiliar adults and children</p> <p>To begin to give simple instructions to a friend</p> <p>To describe what actions I need to do for</p>	<p>To give precise and simple instructions to a friends to make them move (forwards, backwards, turn right, turn left)</p> <p>To explain the order of a set of instructions as an algorithm</p> <p>To read an algorithm and demonstrate what will happen</p>	<p>To give precise and simple instructions to a friends to make them move (forwards, backwards, turn right, turn left) <u>consistently</u></p> <p>To explain the order of a set of instructions as an algorithm <u>and begin to break instructions down into smaller parts</u></p>	<p>To use logical reasoning to decompose an open-ended problem into smaller parts</p> <p>To use algorithms to solve complex problems</p> <p>To use logical reasoning to simplify a program</p> <p>To explain the input and output to program a robot/software</p>	<p>To <u>effectively</u> use logical reasoning to decompose an open-ended problem into smaller parts <u>and begin to identify patterns</u></p> <p>To use <u>precise, accurate and logical</u> algorithms to solve complex problems</p> <p>To use logical reasoning to simplify a program <u>consistently and effectively</u></p>	<p>To decompose an open-ended problem into smaller parts and recognise patterns between programs to solve a problem</p> <p>To design, write and debug programs that achieve a specific goal</p> <p>To evaluate the effectiveness and efficiency of my</p>	<p>To <u>effectively</u> decompose an open-ended problem into smaller parts and <u>consistently</u> recognise patterns between programs to solve a problem</p> <p>To <u>confidently and consistently</u> design, write and debug programs that</p>

		something to happen using software and hardware	<p>To program a robot to do a specific task by using a precise algorithm</p> <p>To use programming software to create simple programs</p> <p>To use logical reasoning to predict the behaviour of simple programs</p> <p>To watch an algorithm and debug to make an algorithm precise</p>	<p>To <u>confidently</u> read an algorithm and demonstrate what will happen</p> <p>To program a robot to do a specific task by using a precise algorithm <u>consistently and explain their thinking</u></p> <p>To <u>consistently use a range of</u> programming software to create simple programs</p> <p>To <u>confidently</u> use logical reasoning to predict the behaviour of simple programs</p> <p>To watch an algorithm and, <u>consistently and confidently</u> debug to make an algorithm precise</p>	<p>To use a sensor within an algorithm</p> <p>To use a variety of commands to create a precise program</p> <p>To detect errors in an algorithm and debug an algorithm using abstraction</p> <p>To evaluate the effectiveness of a program and why a program is suitable</p>	<p>To explain the input and output to program a robot/software <u>and explain how the input affects the output</u></p> <p>To <u>confidently</u> use a sensor within an algorithm</p> <p>To use a variety of commands to create a precise program <u>with greater accuracy and consistency</u></p> <p>To <u>accurately</u> detect errors in an algorithm and <u>precisely</u> debug an algorithm using abstraction</p> <p>To evaluate the effectiveness of a program and why a program is suitable <u>and unsuitable to achieve a specific outcome</u></p>	<p>algorithm as a whole by continually testing the program</p> <p>To use logical reasoning to detect correct errors in algorithms and programs</p> <p>To recognise the use of a variable to achieve a specific outcome</p> <p>To use a variable and operators to stop a program</p>	<p>achieve a specific goal</p> <p>To <u>critically</u> evaluate the effectiveness and efficiency of my algorithm as a whole by continually testing the program</p> <p>To <u>effectively</u> use logical reasoning to <u>confidently</u> detect correct errors in algorithms and programs</p> <p>To <u>confidently</u> recognise the use of a variable to achieve a specific outcome</p> <p>To <u>effectively</u> use a variable and operators to stop a program</p>
Digital Content and the Internet	<p>To begin to use technology to collect information with adult support</p> <p>To begin to understand how to use information from the internet in my work with adult support</p> <p>To understand letters on a keyboard</p> <p>To use a keyboard with adult support on a digital device</p> <p>To begin to understand where I can save work</p>	<p>To begin to use technology to collect information independently</p> <p>To begin to understand how to use information from the internet in my work</p> <p>To understand and use the letters on a keyboard to spell words</p> <p>To know how to use spacing between words</p> <p>To begin to be creative using different technology tools with adult support</p>	<p>To use technology to collect information (text, photos, videos and sounds)</p> <p>To use technology to create, organise and present my work</p> <p>To use information that I have found on the internet</p>	<p>To <u>effectively</u> use technology to collect information (text, photos, videos and sounds)</p> <p>To <u>effectively</u> use technology to <u>confidently</u> create, organise and present my work</p> <p>To <u>confidently and consistently</u> use information that I have found on the internet</p>	<p>To create work using a range of text, pictorial and audio for a specific purpose and audience</p> <p>To modify a template and use a range of tools to create a piece of work for a specific purpose</p> <p>To critically evaluate the effectiveness of my work</p> <p>To begin to use transitions and animations when creating presentations</p> <p>To confidently use information, I have found on the internet and check its reliability</p>	<p>To <u>effectively</u> create work using a range of text, pictorial and audio for a specific purpose and audience</p> <p>To <u>effectively</u> modify a template and <u>confidently</u> use a range of tools to create a piece of work for a specific purpose</p> <p>To critically evaluate the effectiveness of my work <u>and why my work is good and how I could improve it</u></p> <p>To to use transitions and animations when creating presentations</p>	<p>To effectively create digital content by adding appropriate text, images, sound and videos to meet a specific purpose</p> <p>To effectively plan the process of using, finding, creating and modifying digital content</p> <p>To use logically reasoning to choose an appropriate template to modify to effectively meet a purpose</p>	<p>To effectively create digital content by adding appropriate text, images, sound and videos to meet a specific purpose <u>consistently and with confidence</u></p> <p>To effectively <u>and critically</u> plan the process of using, finding, creating and modifying digital content</p> <p>To <u>confidently</u> use logically reasoning to choose an appropriate</p>

	<p>To begin to collect data using physical objects</p>	<p>To begin to save digital content on a familiar online platform</p>				<p>To confidently use information, I have found on the internet and check its reliability <u>with increasing confidence</u></p>	<p>To be digitally critical when evaluating effectiveness of content</p> <p>To be digitally critical when searching for information online by checking its reliability and plausibility</p>	<p>template to modify to effectively meet a purpose <u>and articulate their how it meets the purpose</u></p> <p>To be digitally critical when evaluating effectiveness of content <u>by explain and reasoning their understanding of content</u></p> <p>To be digitally critical when searching for information online by checking its reliability and plausibility <u>consistently</u></p>
			<p>To be creative using different technology (shapes)</p> <p>To use a keyboard to add, delete and space text</p>	<p>To be <u>consistently</u> creative using different technology (shapes)</p> <p>To use a keyboard to add, delete and space text <u>with increasing confidence</u></p>	<p>To use technology creatively when creating work online using a range of different effects appropriately (font, letter size, colour, etc.)</p> <p>To use a keyboard confidently and use spellchecker to review my work</p> <p>To change the appearance of text to increase its effectiveness for a specific purpose</p>	<p>To <u>effectively</u> use technology creatively when creating work online using a range of different effects appropriately (font, letter size, colour, etc.) <u>with confidence</u></p> <p>To use a keyboard confidently and <u>effectively</u> use spellchecker to review my work</p> <p>To <u>effectively and consistently</u> change the appearance of text to increase its effectiveness for a specific purpose</p>	<p>To effectively select, use and combine appropriate digital tools to create effects to enhance my work creatively</p> <p>To use a keyboard with increasing fluency and pace</p> <p>To be digitally critically when choosing appropriate tools to edit the appearance of text and images to meet a specific purpose</p>	<p>To effectively select, use and combine appropriate digital tools to create effects to enhance my work creatively <u>consistently to meet a purpose</u></p> <p>To <u>confidently</u> use a keyboard with increasing fluency and pace</p> <p>To be digitally critically when choosing appropriate tools to edit the appearance of text and images to meet a specific purpose <u>and explain why they have edited in a specific way</u></p>

			To save and retrieve digital content on an online platform	To <u>consistently</u> save and retrieve digital content on an online platform <u>without any adult support</u>	To save, store and retrieve work on an online platform or school network	To <u>confidently and consistently</u> save, store and retrieve work on an online platform or school network <u>without adult support</u>	To save, store and retrieve work on an appropriate online platform or school network	To <u>confidently and consistently</u> save, store and retrieve work on an appropriate online platform or school network <u>and explain why they have saved their work on the appropriate platform</u>
			To make and save spreadsheets created on a digital device To begin to use charts and graphs to represent data To begin to use branching database	To <u>confidently</u> make and save spreadsheets created on a digital device To use charts and graphs to represent data <u>without adult support</u> To use branching database <u>without adult support</u>	To describe and explain different ways data can be organised digitally for different purposes (charts/graphs) To plan, create and search a database to answer questions I can collect data and identify when data could be inaccurate To collect data for a specific purpose and present data using an appropriate way	To <u>confidently</u> describe and explain different ways data can be organised digitally for different purposes (charts/graphs) <u>and why data is presented in a specific way</u> To <u>logically and effectively</u> plan, create and search a database to answer questions To <u>confidently</u> collect data and <u>consistently</u> identify when data could be inaccurate To <u>confidently</u> collect data for a specific purpose and present data <u>effectively</u> using an appropriate way	To effectively create, critically analyse, confidently evaluate and appropriately present data using spreadsheets, databases and graphs To input a range of formulas to create data (adding, averages) To appropriately edit the format of a cell on a database for different purposes To check the plausibility and accuracy of data collected and how it can be interpreted in different ways	To effectively create, critically analyse, confidently evaluate and appropriately present data using spreadsheets, databases and graphs <u>consistently and explain why they have presented data in specific way</u> To input a range of formulas to create data (adding, averages) <u>with confidence</u> To appropriately edit the format of a cell on a database for different purposes <u>with confidence</u> To <u>critically</u> check the plausibility and accuracy of data collected and how it can be interpreted in different ways
Understanding the Application of IT	To understand what technology is To give example of technology	To understand what technology is and being able to understand how it is used	To identify and explain the benefits of using technology	To <u>confidently</u> identify and explain the benefits of using technology <u>and explain why the technology is beneficial</u>	To describe whether I am using something from the internet, school network or a digital device	To <u>confidently</u> describe whether I am using something from the internet, school network or a digital device	To explain the internet services for different purposes	To <u>effectively</u> explain the internet services for different purposes <u>and why the</u>

	<p>To begin to use website links with adult support</p> <p>To begin to understand ways technology is used at home with adult support</p> <p>To begin to identify technology in the local area</p> <p>To make an internet search with an adult</p>	<p>To give an example of technology and how it is used</p> <p>To begin to use website links</p> <p>To begin to understand ways that technology is used at home and at school.</p> <p>To begin to identify technology in the local area and how it is used</p> <p>To begin to understand how to make an internet search</p>	<p>To explain how the real world is different to the online world</p> <p>To explain how I can share my work online with others</p> <p>To explain what inputs and outputs are</p>	<p>To explain how the real world is different to the online world <u>and reason the understanding</u></p> <p>To <u>confidently</u> explain how I can share my work online with others</p> <p>To explain what inputs and outputs are <u>in detail</u></p>	<p>To choose which digital application to use to meet a purpose</p> <p>To explain the design of a web-page and the external links</p> <p>To choose an appropriate online platform to collaborate with others</p> <p>To create a hyperlink to a website on the World Wide Web</p>	<p>To choose which digital application to use to meet a purpose <u>and explain my choice</u></p> <p>To explain the design of a web-page and the external links <u>by making links with others</u></p> <p>To <u>critically</u> choose an appropriate online platform to collaborate with others <u>and explain my choice</u></p> <p>To <u>confidently and consistently</u> create a hyperlink to a website on the World Wide Web</p>	<p>To understand 'copyright' and describe what it means</p> <p>To describe how to acknowledge sources from the internet</p> <p>To describe how information is transported on the internet</p> <p>To understand different types of tools used online and on technologies that can be used for collaboration and communication</p>	<p><u>services are important</u></p> <p>To <u>confidently</u> understand 'copyright', describe what it means <u>and why it is important</u></p> <p>To <u>confidently</u> describe how to acknowledge sources from the internet</p> <p>To describe how information is transported on the internet <u>in great detail</u></p> <p>To understand different types of tools used online and on technologies that can be used for collaboration and communication <u>and compare how we use them</u></p>
			<p>To explain why you use technology in the classroom</p> <p>To explain why technology is used in the local area</p> <p>To recognise common uses of information technology outside of school</p>	<p>To explain <u>and compare</u> why you use technology in the classroom</p> <p>To explain <u>and compare</u> why technology is used in the local area</p> <p>To recognise <u>and compare</u> common uses of information technology outside of school</p>				
			<p>To make simple internet searches to find information</p>	<p>To <u>accurately</u> make simple internet searches to find information <u>using specific keywords</u></p>	<p>To use search engines to find appropriate websites using specific keywords</p>	<p>To use search engines <u>effectively and accurately</u> to find appropriate websites using specific keywords</p>	<p>To use keywords to make effective internet searches and evaluate rankings of websites and digital content</p>	<p>To <u>consistently and accurately</u> use keywords to make effective internet searches and <u>critically</u> evaluate</p>

			To retrieve information from the internet to investigate questions	To accurately retrieve information from the internet to investigate questions and check its relevance	To understand and check who owns images and text on the internet To identify key words to use when searching the World Wide Web safely	To understand and check who owns images and text on the internet and explain how you know To effectively and accurately identify key words to use when searching the World Wide Web safely	To evaluate the reliability of websites To explain how website are ranked and selected based on how they are searched	rankings of websites and digital content To critically evaluate the reliability of websites To confidently explain how website are ranked and selected based on how they are searched by making comparison
Online Safety and Appropriate Use	To begin to use technology safely To ask an adult to use the internet To understand who is a trusted adult that can help with internet problems To understand how to be kind online To understand how long I should spend on a device To know how to handle devices and technology carefully To begin to understand what online bullying is	To use technology safely To understand what respectfully means and apply that to online To understand why I should ask an adult to use the internet To understand why we should be kind online To understand how long I should spend on a device and how spending too long can affect me To know how to handle devices and technology carefully and begin to understand how devices can be broken To understand what online bullying is and make links to physical bullying,	To use technology safely and respectfully	To use technology safely and respectfully with confidence	To use technology safely, responsibly and respectfully To recognise and describe acceptable and unacceptable behaviour online To understand how and why to report content and concerns	To use technology safely, responsibly and respectfully with confidence To accurately recognise and confidently describe acceptable and unacceptable behaviour online To understand how and why to report content and concerns in detail	To use technology safely, responsibly and respectfully To recognise, describe and explain acceptable and unacceptable behaviour online effectively To understand how and why to report content and concerns by explaining the most appropriate method of reporting	To use technology safely, responsibly and respectfully with confidence To accurately recognise, describe in detail and effectively explain acceptable and unacceptable behaviour online effectively To understand how and why to report content and concerns by explaining the most appropriate method of reporting and reason their actions
			To explain why it is important to keep personal information safe	To explain why it is important to keep personal information safe and what could happen if your personal information is not kept safely	To describe how online message can be hurtful To explore online plagiarism	To describe how and why online message can be hurtful	To compare online bullying to other types of bullying To identify similarities and	To critically compare online bullying to other types of bullying focusing on

			<p>To understand who I should go to for support when online and why I should do this</p> <p>To understand what content and contact is unsafe when online and how you should act upon concerns</p> <p>To explain how people can find out personal information about you by what you put online</p> <p>To use the internet safely by using keywords to search for information</p> <p>To explain how we act if we are being bullied online</p>	<p>To understand who I should go to for support when online and why I should do this <u>using experiences in their own lives</u></p> <p>To <u>critically</u> understand what content and contact is unsafe when online and how you should act upon concerns <u>by explaining their reasoning</u></p> <p>To <u>confidently</u> explain how people can find out personal information about you by what you put online</p> <p>To <u>accurately and effectively</u> use the internet safely by using keywords to search for information</p> <p>To explain how we act if we are being bullied online <u>and why we acted that way</u></p>	<p>To explore online games and whether they are age appropriate</p> <p>To create a safe online profile</p> <p>To describe how to be a good digital citizen online and in real life</p>	<p>To explore online plagiarism <u>and why it is important</u></p> <p>To <u>critically</u> explore online games and whether they are age appropriate <u>and explain why</u></p> <p>To <u>effectively</u> create a safe <u>and secure</u> online profile</p> <p>To describe how to be a good digital citizen online and in real life <u>by making comparisons between reality and virtual</u></p>	<p>differences between strategies for online bullying and other types of bullying</p> <p>To recognise secure and insecure websites</p> <p>To understand safe and unsafe information to share with other online</p> <p>To evaluate media aimed at boys and girls</p>	<p><u>similarities and differences</u></p> <p>To identify similarities and differences between strategies for online bullying and other types of bullying <u>and which strategies are effective for different situations</u></p> <p>To <u>accurately</u> recognise secure and insecure websites <u>and explain how secure they are</u></p> <p>To understand safe and unsafe information to share with other online <u>by critically evaluating the information</u></p> <p>To <u>critically</u> evaluate media aimed at boys and girls <u>and why they may be similar or different</u></p>
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EYFS

	EYFS- ELG	EYFS- Exceeding ELG
UNDERSTANDING AND CREATING ALGORITHMS	<p>To understand how to make a floor robot move</p> <p>To follow instructions from a friend or familiar adult</p> <p>To begin to describe what actions I need to do for something to happen using hardware</p>	<p>To understand how to make a floor robot move and begin to give simple instructions</p> <p>To follow instructions from unfamiliar adults and children</p> <p>To begin to give simple instructions to a friend</p> <p>To describe what actions I need to do for something to happen using software and hardware</p>
DIGITAL CONTENT AND THE INTERNET	<p>To begin to use technology to collect information with adult support</p> <p>To begin to understand how to use information from the internet in my work with adult support</p> <p>To understand letters on a keyboard</p> <p>To use a keyboard with adult support on a digital device</p> <p>To begin to understand where I can save work</p> <p>To begin to collect data using physical objects</p>	<p>To begin to use technology to collect information independently</p> <p>To begin to understand how to use information from the internet in my work</p> <p>To understand and use the letters on a keyboard to spell words</p> <p>To know how to use spacing between words</p> <p>To begin to be creative using different technology tools with adult support</p> <p>To begin to save digital content on a familiar online platform</p>
UNDERSTANDING THE APPLICATION OF IT	<p>To understand what technology is</p> <p>To give example of technology</p> <p>To begin to use website links with adult support</p>	<p>To understand what technology is and being able to understand how it is used</p> <p>To give an example of technology and how it is used</p> <p>To begin to use website links</p>

	<p>To begin to understand ways technology is used at home with adult support</p> <p>To begin to identify technology in the local area</p> <p>To make an internet search with an adult</p>	<p>To begin to understand ways that technology is used at home and at school.</p> <p>To begin to identify technology in the local area and how it is used</p> <p>To begin to understand how to make an internet search</p>
ONLINE SAFETY AND APPROPRIATE USE	<p>To begin to use technology safely</p> <p>To ask an adult to use the internet</p> <p>To understand who is a trusted adult that can help with internet problems</p> <p>To understand how to be kind online</p> <p>To understand how long I should spend on a device</p> <p>To know how to handle devices and technology carefully</p> <p>To begin to understand what online bullying is</p>	<p>To use technology safely</p> <p>To understand what respectfully means and apply that to online</p> <p>To understand why I should ask an adult to use the internet</p> <p>To understand why we should be kind online</p> <p>To understand how long I should spend on a device and how spending too long can affect me</p> <p>To know how to handle devices and technology carefully and begin to understand how devices can be broken</p> <p>To understand what online bullying is and make links to physical bullying,</p>

YEAR 1

AUTUMN UNIT	Key generic learning objectives	Unit specific learning objectives	KS1 working at the EXPECTED STANDARD	KS1 working ABOVE the expected standard
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Me, My family, My World	Understanding and Creating Algorithms	<ul style="list-style-type: none"> To give instructions to a friend and follow their instructions to move around To describe what actions, I will need to do to make something happen. 	<p>To give precise and simple instructions to a friends to make them move (forwards, backwards, turn right, turn left)</p> <p>To explain the order of a set of instructions as an algorithm</p> <p>To read an algorithm and demonstrate what will happen</p> <p>To program a robot to do a specific task by using a precise algorithm</p> <p>To use programming software to create simple programs</p> <p>To use logical reasoning to predict the behaviour of simple programs</p> <p>To watch an algorithm and debug to make an algorithm precise</p>	<p>To give precise and simple instructions to a friends to make them move (forwards, backwards, turn right, turn left) <u>consistently</u></p> <p>To explain the order of a set of instructions as an algorithm <u>and begin to break instructions down into smaller parts</u></p> <p>To <u>confidently</u> read an algorithm and demonstrate what will happen</p> <p>To program a robot to do a specific task by using a precise algorithm <u>consistently and explain their thinking</u></p> <p>To <u>consistently use a range of</u> programming software to create simple programs</p> <p>To <u>confidently</u> use logical reasoning to predict the behaviour of simple programs</p> <p>To watch an algorithm and, <u>consistently and confidently</u> debug to make an algorithm precise</p>
	Digital Content and the Internet	<ul style="list-style-type: none"> To use technology to collect information (text, photos) To begin to use technology to create, organise and present my work To understand how to use information from the internet in my work To use a keyboard on a digital device to type text To begin to be creative using different technology tools To begin to save and retrieve digital content on an online platform 	<p>To use technology to collect information (text, photos, videos and sounds)</p> <p>To use technology to create, organise and present my work</p> <p>To use information that I have found on the internet</p> <p>To be creative using different technology (shapes)</p> <p>To use a keyboard to add, delete and space text</p> <p>To save and retrieve digital content on an online platform</p> <p>To make and save spreadsheets created on a digital device</p> <p>To begin to use charts and graphs to represent data</p> <p>To begin to use branching database</p>	<p>To <u>effectively</u> use technology to collect information (text, photos, videos and sounds)</p> <p>To <u>effectively</u> use technology to <u>confidently</u> create, organise and present my work</p> <p>To <u>confidently and consistently</u> use information that I have found on the internet</p> <p>To be <u>consistently</u> creative using different technology (shapes)</p> <p>To use a keyboard to add, delete and space text <u>with increasing confidence</u></p> <p>To <u>consistently</u> save and retrieve digital content on an online platform <u>without any adult support</u></p> <p>To <u>confidently</u> make and save spreadsheets created on a digital device</p> <p>To use charts and graphs to represent data <u>without adult support</u></p> <p>To use branching database <u>without adult support</u></p>
	Understanding the Application of IT	<ul style="list-style-type: none"> To understand the uses of everyday technology To use website links to find information To begin to understand the benefits of using technology 	<p>To identify and explain the benefits of using technology</p> <p>To explain how the real world is different to the online world</p> <p>To explain how I can share my work online with others</p>	<p>To <u>confidently</u> identify and explain the benefits of using technology <u>and explain why the technology is beneficial</u></p> <p>To explain how the real world is different to the online world <u>and reason the understanding</u></p>

		<ul style="list-style-type: none"> To understand how to make an internet search 	<p>To explain what inputs and outputs are</p> <p>To explain why you use technology in the classroom</p> <p>To explain why technology is used in the local area</p> <p>To recognise common uses of information technology outside of school</p> <p>To make simple internet searches to find information</p> <p>To retrieve information from the internet to investigate questions</p>	<p>To confidently explain how I can share my work online with others</p> <p>To explain what inputs and outputs are <u>in detail</u></p> <p>To explain and compare why you use technology in the classroom</p> <p>To explain and compare why technology is used in the local area</p> <p>To recognise and compare common uses of information technology outside of school</p> <p>To accurately make simple internet searches to find information <u>using specific keywords</u></p> <p>To accurately retrieve information from the internet to investigate questions and check its relevance</p>
	Online Safety and Appropriate Use	<ul style="list-style-type: none"> To use technology safely and respectfully To name and date a document on a secure online platform To use the internet safely to find appropriate images 	<p>To use technology safely and respectfully</p> <p>To explain why it is important to keep personal information safe</p> <p>To understand who I should go to for support when online and why I should do this</p> <p>To understand what content and contact is unsafe when online and how you should act upon concerns</p> <p>To explain how people can find out personal information about you by what you put online</p> <p>To use the internet safely by using keywords to search for information</p> <p>To explain how we act if we are being bullied online</p>	<p>To use technology safely and respectfully <u>with confidence</u></p> <p>To explain why it is important to keep personal information safe and what could happen if your personal information is not kept safely</p> <p>To understand who I should go to for support when online and why I should do this <u>using experiences in their own lives</u></p> <p>To critically understand what content and contact is unsafe when online and how you should act upon concerns by explaining their reasoning</p> <p>To confidently explain how people can find out personal information about you by what you put online</p> <p>To accurately and effectively use the internet safely by using keywords to search for information</p> <p>To explain how we act if we are being bullied online and why we acted that way</p>

SPRING UNIT	Key generic learning objectives	Unit specific learning objectives	KS1 working at the EXPECTED STANDARD	KS1 working ABOVE the expected standard
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<p>Light and Dark: Living in Victorian Sunderland</p>	<p>Understanding and Creating Algorithms</p>	<ul style="list-style-type: none"> To begin to understand and demonstrate what algorithms are To press buttons to create an algorithm for a robot or program To begin to use software/apps to create precise programs To begin to predict what will happen in a short sequence of instructions using logical reasoning To begin to understand and demonstrate what debug is 	<p>To give precise and simple instructions to a friends to make them move (forwards, backwards, turn right, turn left)</p> <p>To explain the order of a set of instructions as an algorithm</p> <p>To read an algorithm and demonstrate what will happen</p> <p>To program a robot to do a specific task by using a precise algorithm</p> <p>To use programming software to create simple programs</p> <p>To use logical reasoning to predict the behaviour of simple programs</p> <p>To watch an algorithm and debug to make an algorithm precise</p>	<p>To give precise and simple instructions to a friends to make them move (forwards, backwards, turn right, turn left) <u>consistently</u></p> <p>To explain the order of a set of instructions as an algorithm <u>and begin to break instructions down into smaller parts</u></p> <p>To <u>confidently</u> read an algorithm and demonstrate what will happen</p> <p>To program a robot to do a specific task by using a precise algorithm <u>consistently and explain their thinking</u></p> <p>To <u>consistently use a range of</u> programming software to create simple programs</p> <p>To <u>confidently</u> use logical reasoning to predict the behaviour of simple programs</p> <p>To watch an algorithm and, <u>consistently and confidently</u> debug to make an algorithm precise</p>
	<p>Digital Content and the Internet</p>	<ul style="list-style-type: none"> To use technology to collect information (text, photos) To begin to use technology to create, organise and present my work To understand how to use information from the internet in my work To use a keyboard on a digital device to type text To begin to be creative using different technology tools To begin to save and retrieve digital content on an online platform 	<p>To use technology to collect information (text, photos, videos and sounds)</p> <p>To use technology to create, organise and present my work</p> <p>To use information that I have found on the internet</p> <p>To be creative using different technology (shapes)</p> <p>To use a keyboard to add, delete and space text</p> <p>To save and retrieve digital content on an online platform</p> <p>To make and save spreadsheets created on a digital device</p> <p>To begin to use charts and graphs to represent data</p> <p>To begin to use branching database</p>	<p>To <u>effectively</u> use technology to collect information (text, photos, videos and sounds)</p> <p>To <u>effectively</u> use technology to <u>confidently</u> create, organise and present my work</p> <p>To <u>confidently and consistently</u> use information that I have found on the internet</p> <p>To be <u>consistently</u> creative using different technology (shapes)</p> <p>To use a keyboard to add, delete and space text <u>with increasing confidence</u></p> <p>To <u>consistently</u> save and retrieve digital content on an online platform <u>without any adult support</u></p> <p>To <u>confidently</u> make and save spreadsheets created on a digital device</p> <p>To use charts and graphs to represent data <u>without adult support</u></p> <p>To use branching database <u>without adult support</u></p>
	<p>Understanding the Application of IT</p>	<ul style="list-style-type: none"> To use website links to find information To begin to understand the benefits of using technology To recognise ways that technology is used at home 	<p>To identify and explain the benefits of using technology</p> <p>To explain how the real world is different to the online world</p> <p>To explain how I can share my work online with others</p>	<p>To <u>confidently</u> identify and explain the benefits of using technology <u>and explain why the technology is beneficial</u></p> <p>To explain how the real world is different to the online world <u>and reason the understanding</u></p>

		<ul style="list-style-type: none"> To understand how to make an internet search 	<p>To explain what inputs and outputs are</p> <p>To explain why you use technology in the classroom</p> <p>To explain why technology is used in the local area</p> <p>To recognise common uses of information technology outside of school</p> <p>To make simple internet searches to find information</p> <p>To retrieve information from the internet to investigate questions</p>	<p>To confidently explain how I can share my work online with others</p> <p>To explain what inputs and outputs are <u>in detail</u></p> <p>To explain and compare why you use technology in the classroom</p> <p>To explain and compare why technology is used in the local area</p> <p>To recognise and compare common uses of information technology outside of school</p> <p>To accurately make simple internet searches to find information <u>using specific keywords</u></p> <p>To accurately retrieve information from the internet to investigate questions and check its relevance</p>
	Online Safety and Appropriate Use	<ul style="list-style-type: none"> To use technology safely and respectfully To know what personal information is and how to keep it safe To understand who I should go to if I need help online 	<p>To use technology safely and respectfully</p> <p>To explain why it is important to keep personal information safe</p> <p>To understand who I should go to for support when online and why I should do this</p> <p>To understand what content and contact is unsafe when online and how you should act upon concerns</p> <p>To explain how people can find out personal information about you by what you put online</p> <p>To use the internet safely by using keywords to search for information</p> <p>To explain how we act if we are being bullied online</p>	<p>To use technology safely and respectfully <u>with confidence</u></p> <p>To explain why it is important to keep personal information safe and what could happen if your personal information is not kept safely</p> <p>To understand who I should go to for support when online and why I should do this <u>using experiences in their own lives</u></p> <p>To critically understand what content and contact is unsafe when online and how you should act upon concerns by explaining their reasoning</p> <p>To confidently explain how people can find out personal information about you by what you put online</p> <p>To accurately and effectively use the internet safely by using keywords to search for information</p> <p>To explain how we act if we are being bullied online and why we acted that way</p>

SUMMER UNIT	Key generic learning objectives	Unit specific learning objectives	KS1 working at the EXPECTED STANDARD	KS1 working ABOVE the expected standard
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<p>The Seaside: Sunderland's History</p>	<p>Understanding and Creating Algorithms</p>	<ul style="list-style-type: none"> To begin to understand and demonstrate what algorithms are To press buttons to create an algorithm for a robot or program To begin to use software/apps to create precise programs To begin to predict what will happen in a short sequence of instructions using logical reasoning To begin to understand and demonstrate what debug is 	<p>To give precise and simple instructions to a friends to make them move (forwards, backwards, turn right, turn left)</p> <p>To explain the order of a set of instructions as an algorithm</p> <p>To read an algorithm and demonstrate what will happen</p> <p>To program a robot to do a specific task by using a precise algorithm</p> <p>To use programming software to create simple programs</p> <p>To use logical reasoning to predict the behaviour of simple programs</p> <p>To watch an algorithm and debug to make an algorithm precise</p>	<p>To give precise and simple instructions to a friends to make them move (forwards, backwards, turn right, turn left) <u>consistently</u></p> <p>To explain the order of a set of instructions as an algorithm <u>and begin to break instructions down into smaller parts</u></p> <p>To <u>confidently</u> read an algorithm and demonstrate what will happen</p> <p>To program a robot to do a specific task by using a precise algorithm <u>consistently and explain their thinking</u></p> <p>To <u>consistently use a range of</u> programming software to create simple programs</p> <p>To <u>confidently</u> use logical reasoning to predict the behaviour of simple programs</p> <p>To watch an algorithm and, <u>consistently and confidently</u> debug to make an algorithm precise</p>
	<p>Digital Content and the Internet</p>	<ul style="list-style-type: none"> To begin to use technology to create, organise and present my work To understand how to use information from the internet in my work To use a keyboard on a digital device to type text To begin to be creative using different technology tools To begin to save and retrieve digital content on an online platform To use a spreadsheet to represent data 	<p>To use technology to collect information (text, photos, videos and sounds)</p> <p>To use technology to create, organise and present my work</p> <p>To use information that I have found on the internet</p> <p>To be creative using different technology (shapes)</p> <p>To use a keyboard to add, delete and space text</p> <p>To save and retrieve digital content on an online platform</p> <p>To make and save spreadsheets created on a digital device</p> <p>To begin to use charts and graphs to represent data</p> <p>To begin to use branching database</p>	<p>To <u>effectively</u> use technology to collect information (text, photos, videos and sounds)</p> <p>To <u>effectively</u> use technology to <u>confidently</u> create, organise and present my work</p> <p>To <u>confidently and consistently</u> use information that I have found on the internet</p> <p>To be <u>consistently</u> creative using different technology (shapes)</p> <p>To use a keyboard to add, delete and space text <u>with increasing confidence</u></p> <p>To <u>consistently</u> save and retrieve digital content on an online platform <u>without any adult support</u></p> <p>To <u>confidently</u> make and save spreadsheets created on a digital device</p> <p>To use charts and graphs to represent data <u>without adult support</u></p> <p>To use branching database <u>without adult support</u></p>
	<p>Understanding the Application of IT</p>	<ul style="list-style-type: none"> To use website links to find information To begin to understand the benefits of using technology To recognise ways that technology is used within the local community 	<p>To identify and explain the benefits of using technology</p> <p>To explain how the real world is different to the online world</p> <p>To explain how I can share my work online with others</p>	<p>To <u>confidently</u> identify and explain the benefits of using technology <u>and explain why the technology is beneficial</u></p> <p>To explain how the real world is different to the online world <u>and reason the understanding</u></p>

		<ul style="list-style-type: none"> To understand how to make an internet search 	<p>To explain what inputs and outputs are</p> <p>To explain why you use technology in the classroom</p> <p>To explain why technology is used in the local area</p> <p>To recognise common uses of information technology outside of school</p> <p>To make simple internet searches to find information</p> <p>To retrieve information from the internet to investigate questions</p>	<p>To confidently explain how I can share my work online with others</p> <p>To explain what inputs and outputs are in detail</p> <p>To explain and compare why you use technology in the classroom</p> <p>To explain and compare why technology is used in the local area</p> <p>To recognise and compare common uses of information technology outside of school</p> <p>To accurately make simple internet searches to find information using specific keywords</p> <p>To accurately retrieve information from the internet to investigate questions and check its relevance</p>
	Online Safety and Appropriate Use	<ul style="list-style-type: none"> To use technology safely and respectfully To understand who I should go to if I need help online To identify what is online bullying 	<p>To use technology safely and respectfully</p> <p>To explain why it is important to keep personal information safe</p> <p>To understand who I should go to for support when online and why I should do this</p> <p>To understand what content and contact is unsafe when online and how you should act upon concerns</p> <p>To explain how people can find out personal information about you by what you put online</p> <p>To use the internet safely by using keywords to search for information</p> <p>To explain how we act if we are being bullied online</p>	<p>To use technology safely and respectfully with confidence</p> <p>To explain why it is important to keep personal information safe and what could happen if your personal information is not kept safely</p> <p>To understand who I should go to for support when online and why I should do this using experiences in their own lives</p> <p>To critically understand what content and contact is unsafe when online and how you should act upon concerns by explaining their reasoning</p> <p>To confidently explain how people can find out personal information about you by what you put online</p> <p>To accurately and effectively use the internet safely by using keywords to search for information</p> <p>To explain how we act if we are being bullied online and why we acted that way</p>

YEAR 2

AUTUMN UNIT	Key generic learning objectives	Unit specific learning objectives	KS1 working at the EXPECTED STANDARD	KS1 working ABOVE the expected standard
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<p>Homes in Tudor times and the Great Fire of London</p>	<p>Understanding and Creating Algorithms</p>	<ul style="list-style-type: none"> To give precise and simple instructions to a friends to make them move (forwards, backwards, turn right, turn left) To explain the order of a set of instructions as an algorithm To read an algorithm and demonstrate what will happen 	<p>To give precise and simple instructions to a friends to make them move (forwards, backwards, turn right, turn left)</p> <p>To explain the order of a set of instructions as an algorithm</p> <p>To read an algorithm and demonstrate what will happen</p> <p>To program a robot to do a specific task by using a precise algorithm</p> <p>To use programming software to create simple programs</p> <p>To use logical reasoning to predict the behaviour of simple programs</p> <p>To watch an algorithm and debug to make an algorithm precise</p>	<p>To give precise and simple instructions to a friends to make them move (forwards, backwards, turn right, turn left) <u>consistently</u></p> <p>To explain the order of a set of instructions as an algorithm <u>and begin to break instructions down into smaller parts</u></p> <p>To <u>confidently</u> read an algorithm and demonstrate what will happen</p> <p>To program a robot to do a specific task by using a precise algorithm <u>consistently and explain their thinking</u></p> <p>To <u>consistently use a range of</u> programming software to create simple programs</p> <p>To <u>confidently</u> use logical reasoning to predict the behaviour of simple programs</p> <p>To watch an algorithm and, <u>consistently and confidently</u> debug to make an algorithm precise</p>
	<p>Digital Content and the Internet</p>	<ul style="list-style-type: none"> To use technology to collect information (text, photos, videos and sounds) To use technology to create, organise and present my work To use information that I have found on the internet To be creative using different technology (shapes) To use a keyboard to add, delete and space text To save and retrieve digital content on an online platform 	<p>To use technology to collect information (text, photos, videos and sounds)</p> <p>To use technology to create, organise and present my work</p> <p>To use information that I have found on the internet</p> <p>To be creative using different technology (shapes)</p> <p>To use a keyboard to add, delete and space text</p> <p>To save and retrieve digital content on an online platform</p> <p>To make and save spreadsheets created on a digital device</p> <p>To begin to use charts and graphs to represent data</p> <p>To begin to use branching database</p>	<p>To <u>effectively</u> use technology to collect information (text, photos, videos and sounds)</p> <p>To <u>effectively</u> use technology to <u>confidently</u> create, organise and present my work</p> <p>To <u>confidently and consistently</u> use information that I have found on the internet</p> <p>To be <u>consistently</u> creative using different technology (shapes)</p> <p>To use a keyboard to add, delete and space text <u>with increasing confidence</u></p> <p>To <u>consistently</u> save and retrieve digital content on an online platform <u>without any adult support</u></p> <p>To <u>confidently</u> make and save spreadsheets created on a digital device</p> <p>To use charts and graphs to represent data <u>without adult support</u></p> <p>To use branching database <u>without adult support</u></p>
	<p>Understanding the Application of IT</p>	<ul style="list-style-type: none"> To identify and explain the benefits of using technology To explain why you use technology in the classroom 	<p>To identify and explain the benefits of using technology</p> <p>To explain how the real world is different to the online world</p> <p>To explain how I can share my work online with others</p>	<p>To <u>confidently</u> identify and explain the benefits of using technology <u>and explain why the technology is beneficial</u></p> <p>To explain how the real world is different to the online world <u>and reason the understanding</u></p>

		<ul style="list-style-type: none"> To make simple internet searches to find information To retrieve information from the internet to investigate questions 	<p>To explain what inputs and outputs are</p> <p>To explain why you use technology in the classroom</p> <p>To explain why technology is used in the local area</p> <p>To recognise common uses of information technology outside of school</p> <p>To make simple internet searches to find information</p> <p>To retrieve information from the internet to investigate questions</p>	<p>To confidently explain how I can share my work online with others</p> <p>To explain what inputs and outputs are <u>in detail</u></p> <p>To explain <u>and compare</u> why you use technology in the classroom</p> <p>To explain <u>and compare</u> why technology is used in the local area</p> <p>To recognise <u>and compare</u> common uses of information technology outside of school</p> <p>To <u>accurately</u> make simple internet searches to find information <u>using specific keywords</u></p> <p>To <u>accurately</u> retrieve information from the internet to investigate questions <u>and check its relevance</u></p>
	Online Safety and Appropriate Use	<ul style="list-style-type: none"> To use technology safely and respectfully To explain why it is important to keep personal information safe To explain how people can find out personal information about you by what you put online To use the internet safely by using keywords to search for information 	<p>To use technology safely and respectfully</p> <p>To explain why it is important to keep personal information safe</p> <p>To understand who I should go to for support when online and why I should do this</p> <p>To understand what content and contact is unsafe when online and how you should act upon concerns</p> <p>To explain how people can find out personal information about you by what you put online</p> <p>To use the internet safely by using keywords to search for information</p> <p>To explain how we act if we are being bullied online</p>	<p>To use technology safely and respectfully <u>with confidence</u></p> <p>To explain why it is important to keep personal information safe <u>and what could happen if your personal information is not kept safely</u></p> <p>To understand who I should go to for support when online and why I should do this <u>using experiences in their own lives</u></p> <p>To <u>critically</u> understand what content and contact is unsafe when online and how you should act upon concerns <u>by explaining their reasoning</u></p> <p>To <u>confidently</u> explain how people can find out personal information about you by what you put online</p> <p>To <u>accurately and effectively</u> use the internet safely by using keywords to search for information</p> <p>To explain how we act if we are being bullied online <u>and why we acted that way</u></p>

SPRING UNIT	Key generic learning objectives	Unit specific learning objectives	KS1 working at the EXPECTED STANDARD	KS1 working ABOVE the expected standard
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<p>What I Believe: I have the right to a safe place to live.</p>	<p>Understanding and Creating Algorithms</p>	<ul style="list-style-type: none"> To program a robot to do a specific task by using a precise algorithm To use programming software to create simple programs To use logical reasoning to predict the behaviour of simple programs To watch an algorithm and debug to make an algorithm precise 	<p>To give precise and simple instructions to a friends to make them move (forwards, backwards, turn right, turn left)</p> <p>To explain the order of a set of instructions as an algorithm</p> <p>To read an algorithm and demonstrate what will happen</p> <p>To program a robot to do a specific task by using a precise algorithm</p> <p>To use programming software to create simple programs</p> <p>To use logical reasoning to predict the behaviour of simple programs</p> <p>To watch an algorithm and debug to make an algorithm precise</p>	<p>To give precise and simple instructions to a friends to make them move (forwards, backwards, turn right, turn left) <u>consistently</u></p> <p>To explain the order of a set of instructions as an algorithm <u>and begin to break instructions down into smaller parts</u></p> <p>To <u>confidently</u> read an algorithm and demonstrate what will happen</p> <p>To program a robot to do a specific task by using a precise algorithm <u>consistently and explain their thinking</u></p> <p>To <u>consistently use a range of</u> programming software to create simple programs</p> <p>To <u>confidently</u> use logical reasoning to predict the behaviour of simple programs</p> <p>To watch an algorithm and, <u>consistently and confidently</u> debug to make an algorithm precise</p>
	<p>Digital Content and the Internet</p>	<ul style="list-style-type: none"> To use technology to collect information (text, photos, videos and sounds) To use technology to create, organise and present my work To use information that I have found on the internet To be creative using different technology (shapes) To use a keyboard to add, delete and space text To save and retrieve digital content on an online platform To begin to use branching database 	<p>To use technology to collect information (text, photos, videos and sounds)</p> <p>To use technology to create, organise and present my work</p> <p>To use information that I have found on the internet</p> <p>To be creative using different technology (shapes)</p> <p>To use a keyboard to add, delete and space text</p> <p>To save and retrieve digital content on an online platform</p> <p>To make and save spreadsheets created on a digital device</p> <p>To begin to use charts and graphs to represent data</p> <p>To begin to use branching database</p>	<p>To <u>effectively</u> use technology to collect information (text, photos, videos and sounds)</p> <p>To <u>effectively</u> use technology to <u>confidently</u> create, organise and present my work</p> <p>To <u>confidently and consistently</u> use information that I have found on the internet</p> <p>To be <u>consistently</u> creative using different technology (shapes)</p> <p>To use a keyboard to add, delete and space text <u>with increasing confidence</u></p> <p>To <u>consistently</u> save and retrieve digital content on an online platform <u>without any adult support</u></p> <p>To <u>confidently</u> make and save spreadsheets created on a digital device</p> <p>To use charts and graphs to represent data <u>without adult support</u></p> <p>To use branching database <u>without adult support</u></p>
	<p>Understanding the Application of IT</p>	<ul style="list-style-type: none"> To explain why technology is used in the local area To recognise common uses of information technology outside of school To make simple internet searches to find information 	<p>To identify and explain the benefits of using technology</p> <p>To explain how the real world is different to the online world</p> <p>To explain how I can share my work online with others</p>	<p>To <u>confidently</u> identify and explain the benefits of using technology <u>and explain why the technology is beneficial</u></p> <p>To explain how the real world is different to the online world <u>and reason the understanding</u></p>

		<ul style="list-style-type: none"> To retrieve information from the internet to investigate questions 	<p>To explain what inputs and outputs are</p> <p>To explain why you use technology in the classroom</p> <p>To explain why technology is used in the local area</p> <p>To recognise common uses of information technology outside of school</p> <p>To make simple internet searches to find information</p> <p>To retrieve information from the internet to investigate questions</p>	<p>To confidently explain how I can share my work online with others</p> <p>To explain what inputs and outputs are <u>in detail</u></p> <p>To explain and compare why you use technology in the classroom</p> <p>To explain and compare why technology is used in the local area</p> <p>To recognise and compare common uses of information technology outside of school</p> <p>To accurately make simple internet searches to find information <u>using specific keywords</u></p> <p>To accurately retrieve information from the internet to investigate questions and check its relevance</p>
	Online Safety and Appropriate Use	<ul style="list-style-type: none"> To use technology safely and respectfully To understand who I should go to for support when online and why I should do this To understand what content and contact is unsafe when online and how you should act upon concerns To use the internet safely by using keywords to search for information 	<p>To use technology safely and respectfully</p> <p>To explain why it is important to keep personal information safe</p> <p>To understand who I should go to for support when online and why I should do this</p> <p>To understand what content and contact is unsafe when online and how you should act upon concerns</p> <p>To explain how people can find out personal information about you by what you put online</p> <p>To use the internet safely by using keywords to search for information</p> <p>To explain how we act if we are being bullied online</p>	<p>To use technology safely and respectfully <u>with confidence</u></p> <p>To explain why it is important to keep personal information safe and what could happen if your personal information is not kept safely</p> <p>To understand who I should go to for support when online and why I should do this <u>using experiences in their own lives</u></p> <p>To critically understand what content and contact is unsafe when online and how you should act upon concerns by explaining their reasoning</p> <p>To confidently explain how people can find out personal information about you by what you put online</p> <p>To accurately and effectively use the internet safely by using keywords to search for information</p> <p>To explain how we act if we are being bullied online and why we acted that way</p>

SUMMER UNIT	Key generic learning objectives	Unit specific learning objectives	KS1 working at the EXPECTED STANDARD	KS1 working ABOVE the expected standard
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<p>Transport: Planes, trains and automobiles</p>	<p>Understanding and Creating Algorithms</p>	<ul style="list-style-type: none"> To program a robot to do a specific task by using a precise algorithm To use programming software to create simple programs To use logical reasoning to predict the behaviour of simple programs To watch an algorithm and debug to make an algorithm precise 	<p>To give precise and simple instructions to a friends to make them move (forwards, backwards, turn right, turn left)</p> <p>To explain the order of a set of instructions as an algorithm</p> <p>To read an algorithm and demonstrate what will happen</p> <p>To program a robot to do a specific task by using a precise algorithm</p> <p>To use programming software to create simple programs</p> <p>To use logical reasoning to predict the behaviour of simple programs</p> <p>To watch an algorithm and debug to make an algorithm precise</p>	<p>To give precise and simple instructions to a friends to make them move (forwards, backwards, turn right, turn left) <u>consistently</u></p> <p>To explain the order of a set of instructions as an algorithm <u>and begin to break instructions down into smaller parts</u></p> <p>To <u>confidently</u> read an algorithm and demonstrate what will happen</p> <p>To program a robot to do a specific task by using a precise algorithm <u>consistently and explain their thinking</u></p> <p>To <u>consistently use a range of</u> programming software to create simple programs</p> <p>To <u>confidently</u> use logical reasoning to predict the behaviour of simple programs</p> <p>To watch an algorithm and, <u>consistently and confidently</u> debug to make an algorithm precise</p>
	<p>Digital Content and the Internet</p>	<ul style="list-style-type: none"> To use technology to create, organise and present my work To use information that I have found on the internet To use a keyboard to add, delete and space text To save and retrieve digital content on an online platform To make and save spreadsheets created on a digital device To begin to use charts and graphs to represent data 	<p>To use technology to collect information (text, photos, videos and sounds)</p> <p>To use technology to create, organise and present my work</p> <p>To use information that I have found on the internet</p> <p>To be creative using different technology (shapes)</p> <p>To use a keyboard to add, delete and space text</p> <p>To save and retrieve digital content on an online platform</p> <p>To make and save spreadsheets created on a digital device</p> <p>To begin to use charts and graphs to represent data</p> <p>To begin to use branching database</p>	<p>To <u>effectively</u> use technology to collect information (text, photos, videos and sounds)</p> <p>To <u>effectively</u> use technology to <u>confidently</u> create, organise and present my work</p> <p>To <u>confidently and consistently</u> use information that I have found on the internet</p> <p>To be <u>consistently</u> creative using different technology (shapes)</p> <p>To use a keyboard to add, delete and space text <u>with increasing confidence</u></p> <p>To <u>consistently</u> save and retrieve digital content on an online platform <u>without any adult support</u></p> <p>To <u>confidently</u> make and save spreadsheets created on a digital device</p> <p>To use charts and graphs to represent data <u>without adult support</u></p> <p>To use branching database <u>without adult support</u></p>
	<p>Understanding the Application of IT</p>	<ul style="list-style-type: none"> To explain how the real world is different to the online world To explain how I can share my work online with others To explain what inputs and outputs are 	<p>To identify and explain the benefits of using technology</p> <p>To explain how the real world is different to the online world</p> <p>To explain how I can share my work online with others</p>	<p>To <u>confidently</u> identify and explain the benefits of using technology <u>and explain why the technology is beneficial</u></p> <p>To explain how the real world is different to the online world <u>and reason the understanding</u></p>

		<ul style="list-style-type: none"> To make simple internet searches to find information To retrieve information from the internet to investigate questions 	<p>To explain what inputs and outputs are</p> <p>To explain why you use technology in the classroom</p> <p>To explain why technology is used in the local area</p> <p>To recognise common uses of information technology outside of school</p> <p>To make simple internet searches to find information</p> <p>To retrieve information from the internet to investigate questions</p>	<p>To confidently explain how I can share my work online with others</p> <p>To explain what inputs and outputs are in detail</p> <p>To explain and compare why you use technology in the classroom</p> <p>To explain and compare why technology is used in the local area</p> <p>To recognise and compare common uses of information technology outside of school</p> <p>To accurately make simple internet searches to find information using specific keywords</p> <p>To accurately retrieve information from the internet to investigate questions and check its relevance</p>
	Online Safety and Appropriate Use	<ul style="list-style-type: none"> To use technology safely and respectfully To use the internet safely by using keywords to search for information To explain how we act if we are being bullied online 	<p>To use technology safely and respectfully</p> <p>To explain why it is important to keep personal information safe</p> <p>To understand who I should go to for support when online and why I should do this</p> <p>To understand what content and contact is unsafe when online and how you should act upon concerns</p> <p>To explain how people can find out personal information about you by what you put online</p> <p>To use the internet safely by using keywords to search for information</p> <p>To explain how we act if we are being bullied online</p>	<p>To use technology safely and respectfully with confidence</p> <p>To explain why it is important to keep personal information safe and what could happen if your personal information is not kept safely</p> <p>To understand who I should go to for support when online and why I should do this using experiences in their own lives</p> <p>To critically understand what content and contact is unsafe when online and how you should act upon concerns by explaining their reasoning</p> <p>To confidently explain how people can find out personal information about you by what you put online</p> <p>To accurately and effectively use the internet safely by using keywords to search for information</p> <p>To explain how we act if we are being bullied online and why we acted that way</p>

YEAR 3

AUTUMN UNIT	Key generic learning objectives	Unit specific learning objectives	Lower KS2 working at the EXPECTED STANDARD	Lower KS2 working ABOVE the expected standard
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<p>Over 2000 years ago... Stone, Bronze and Iron Age</p>	<p>Understanding and Creating Algorithms</p>	<ul style="list-style-type: none"> To decompose an open-ended problem into smaller parts To sequence instructions to complete a specific outcome 	<p>To use logical reasoning to decompose an open-ended problem into smaller parts</p> <p>To use algorithms to solve complex problems</p> <p>To use logical reasoning to simplify a program</p> <p>To explain the input and output to program a robot/software</p> <p>To use a sensor within an algorithm</p> <p>To use a variety of commands to create a precise program</p> <p>To detect errors in an algorithm and debug an algorithm using abstraction</p> <p>To evaluate the effectiveness of a program and why a program is suitable</p>	<p>To effectively use logical reasoning to decompose an open-ended problem into smaller parts and begin to identify patterns</p> <p>To use precise, accurate and logical algorithms to solve complex problems</p> <p>To use logical reasoning to simplify a program consistently and effectively</p> <p>To explain the input and output to program a robot/software and explain how the input affects the output</p> <p>To confidently use a sensor within an algorithm</p> <p>To use a variety of commands to create a precise program with greater accuracy and consistency</p> <p>To accurately detect errors in an algorithm and precisely debug an algorithm using abstraction</p> <p>To evaluate the effectiveness of a program and why a program is suitable and unsuitable to achieve a specific outcome</p>
	<p>Digital Content and the Internet</p>	<ul style="list-style-type: none"> To use technology to collect information (text, photos, videos, sounds) for a specific purpose) To evaluate digital work and explain how to improve it To understand how to modify a template and use a range of tools to create a piece of work To effectively use information that I have found on the internet To be creative when creating work online using a range of different effects (font, letter size, colour, etc.) To use appropriate keyboard commands to amend text (capitalisation, paragraphs, etc.) To use the spellcheck tool To use technology creatively when creating work online using a range of different effects (font, letter size, colour, etc.) To save, store and retrieve work on an online platform or school network To create a database and add data to it 	<p>To create work using a range of text, pictorial and audio for a specific purpose and audience</p> <p>To modify a template and use a range of tools to create a piece of work for a specific purpose</p> <p>To critically evaluate the effectiveness of my work</p> <p>To begin to use transitions and animations when creating presentations</p> <p>To confidently use information, I have found on the internet and check its reliability</p> <p>To use technology creatively when creating work online using a range of different effects appropriately (font, letter size, colour, etc.)</p> <p>To use a keyboard confidently and use spellchecker to review my work</p> <p>To change the appearance of text to increase its effectiveness for a specific purpose</p> <p>To save, store and retrieve work on an online platform or school network</p> <p>To describe and explain different ways data can be organised digitally for different purposes (charts/graphs)</p>	<p>To effectively create work using a range of text, pictorial and audio for a specific purpose and audience</p> <p>To effectively modify a template and confidently use a range of tools to create a piece of work for a specific purpose</p> <p>To critically evaluate the effectiveness of my work and why my work is good and how I could improve it</p> <p>To to use transitions and animations when creating presentations</p> <p>To confidently use information, I have found on the internet and check its reliability with increasing confidence</p> <p>To effectively use technology creatively when creating work online using a range of different effects appropriately (font, letter size, colour, etc.) with confidence</p> <p>To use a keyboard confidently and effectively use spellchecker to review my work</p> <p>To effectively and consistently change the appearance of text to increase its effectiveness for a specific purpose</p>

		<p>To plan, create and search a database to answer questions</p> <p>I can collect data and identify when data could be inaccurate</p> <p>To collect data for a specific purpose and present data using an appropriate way</p>	<p>To confidently and consistently save, store and retrieve work on an online platform or school network without adult support</p> <p>To confidently describe and explain different ways data can be organised digitally for different purposes (charts/graphs) and why data is presented in a specific way</p> <p>To logically and effectively plan, create and search a database to answer questions</p> <p>To confidently collect data and consistently identify when data could be inaccurate</p> <p>To confidently collect data for a specific purpose and present data effectively using an appropriate way</p>
Understanding the Application of IT	<ul style="list-style-type: none"> To explain ways to communicate with others online To understand how people, collaborate online To use search engines to find appropriate websites To evaluate if an image from online is appropriate for a specific purpose 	<p>To describe whether I am using something from the internet, school network or a digital device</p> <p>To choose which digital application to use to meet a purpose</p> <p>To explain the design of a web-page and the external links</p> <p>To choose an appropriate online platform to collaborate with others</p> <p>To create a hyperlink to a website on the World Wide Web</p> <p>To use search engines to find appropriate websites using specific keywords</p> <p>To understand and check who owns images and text on the internet</p> <p>To identify key words to use when searching the World Wide Web safely</p>	<p>To confidently describe whether I am using something from the internet, school network or a digital device</p> <p>To choose which digital application to use to meet a purpose and explain my choice</p> <p>To explain the design of a web-page and the external links by making links with others</p> <p>To critically choose an appropriate online platform to collaborate with others and explain my choice</p> <p>To confidently and consistently create a hyperlink to a website on the World Wide Web</p> <p>To use search engines effectively and accurately to find appropriate websites using specific keywords</p> <p>To understand and check who owns images and text on the internet and explain how you know</p> <p>To effectively and accurately identify key words to use when searching the World Wide Web safely</p>
Online Safety and Appropriate Use	<ul style="list-style-type: none"> To use technology safely, responsibly and respectfully To recognise acceptable and unacceptable behaviour online To understand how to report content and concerns To identify online bullying using a range of digital devices 	<p>To use technology safely, responsibly and respectfully</p> <p>To recognise and describe acceptable and unacceptable behaviour online</p> <p>To understand how and why to report content and concerns</p> <p>To describe how online message can be hurtful</p> <p>To explore online plagiarism</p> <p>To explore online games and whether they are age appropriate</p>	<p>To use technology safely, responsibly and respectfully with confidence</p> <p>To accurately recognise and confidently describe acceptable and unacceptable behaviour online</p> <p>To understand how and why to report content and concerns in detail</p> <p>To describe how and why online message can be hurtful</p>

			<p>To create a safe online profile</p> <p>To describe how to be a good digital citizen online and in real life</p>	<p>To explore online plagiarism <u>and why it is important</u></p> <p>To <u>critically</u> explore online games and whether they are age appropriate <u>and explain why</u></p> <p>To <u>effectively</u> create a safe <u>and secure</u> online profile</p> <p>To describe how to be a good digital citizen online and in real life <u>by making comparisons between reality and virtual</u></p>
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SPRING UNIT	Key generic learning objectives	Unit specific learning objectives	Lower KS2 working at the EXPECTED STANDARD	Lower KS2 working ABOVE the expected standard
Along the river	Understanding and Creating Algorithms	<ul style="list-style-type: none"> To use repeat commands to make an algorithm more precise To use appropriate programming software or app to achieve specific outcomes To identify patterns within a program To detect errors in an algorithm and debug an algorithm 	<p>To use logical reasoning to decompose an open-ended problem into smaller parts</p> <p>To use algorithms to solve complex problems</p> <p>To use logical reasoning to simplify a program</p> <p>To explain the input and output to program a robot/software</p> <p>To use a sensor within an algorithm</p> <p>To use a variety of commands to create a precise program</p> <p>To detect errors in an algorithm and debug an algorithm using abstraction</p> <p>To evaluate the effectiveness of a program and why a program is suitable</p>	<p>To <u>effectively</u> use logical reasoning to decompose an open-ended problem into smaller parts <u>and begin to identify patterns</u></p> <p>To use <u>precise, accurate and logical</u> algorithms to solve complex problems</p> <p>To use logical reasoning to simplify a program <u>consistently and effectively</u></p> <p>To explain the input and output to program a robot/software <u>and explain how the input affects the output</u></p> <p>To <u>confidently</u> use a sensor within an algorithm</p> <p>To use a variety of commands to create a precise program <u>with greater accuracy and consistency</u></p> <p>To <u>accurately</u> detect errors in an algorithm and <u>precisely</u> debug an algorithm using abstraction</p> <p>To evaluate the effectiveness of a program and why a program is suitable <u>and unsuitable to achieve a specific outcome</u></p>
	Digital Content and the Internet	<ul style="list-style-type: none"> To use technology to collect information (text, photos, videos, sounds) for a specific purpose To evaluate digital work and explain how to improve it To understand how to modify a template and use a range of tools to create a piece of work To effectively use information that I have found on the internet 	<p>To create work using a range of text, pictorial and audio for a specific purpose and audience</p> <p>To modify a template and use a range of tools to create a piece of work for a specific purpose</p> <p>To critically evaluate the effectiveness of my work</p> <p>To begin to use transitions and animations when creating presentations</p>	<p>To <u>effectively</u> create work using a range of text, pictorial and audio for a specific purpose and audience</p> <p>To <u>effectively</u> modify a template and <u>confidently</u> use a range of tools to create a piece of work for a specific purpose</p>

		<ul style="list-style-type: none"> To be creative when creating work online using a range of different effects (font, letter size, colour, etc.) To use appropriate keyboard commands to amend text (capitalisation, paragraphs, etc.) To use the spellcheck tool To use technology creatively when creating work online using a range of different effects (font, letter size, colour, etc.) To save, store and retrieve work on an online platform or school network 	<p>To confidently use information, I have found on the internet and check its reliability</p> <p>To use technology creatively when creating work online using a range of different effects appropriately (font, letter size, colour, etc.)</p> <p>To use a keyboard confidently and use spellchecker to review my work</p> <p>To change the appearance of text to increase its effectiveness for a specific purpose</p> <p>To save, store and retrieve work on an online platform or school network</p> <p>To describe and explain different ways data can be organised digitally for different purposes (charts/graphs)</p> <p>To plan, create and search a database to answer questions</p> <p>I can collect data and identify when data could be inaccurate</p> <p>To collect data for a specific purpose and present data using an appropriate way</p>	<p>To critically evaluate the effectiveness of my work <u>and why my work is good and how I could improve it</u></p> <p>To use transitions and animations when creating presentations</p> <p>To confidently use information, I have found on the internet and check its reliability <u>with increasing confidence</u></p> <p>To <u>effectively</u> use technology creatively when creating work online using a range of different effects appropriately (font, letter size, colour, etc.) <u>with confidence</u></p> <p>To use a keyboard confidently and <u>effectively</u> use spellchecker to review my work</p> <p>To <u>effectively and consistently</u> change the appearance of text to increase its effectiveness for a specific purpose</p> <p>To <u>confidently and consistently</u> save, store and retrieve work on an online platform or school network <u>without adult support</u></p> <p>To <u>confidently</u> describe and explain different ways data can be organised digitally for different purposes (charts/graphs) <u>and why data is presented in a specific way</u></p> <p>To <u>logically and effectively</u> plan, create and search a database to answer questions</p> <p>To <u>confidently</u> collect data and <u>consistently</u> identify when data could be inaccurate</p> <p>To <u>confidently</u> collect data for a specific purpose and present data <u>effectively</u> using an appropriate way</p>
	<h3>Understanding the Application of IT</h3>	<ul style="list-style-type: none"> To understand what a computer network is To talk about the different parts of a computer and how they work To use search engines to find appropriate websites To evaluate if an image from online is appropriate for a specific purpose 	<p>To describe whether I am using something from the internet, school network or a digital device</p> <p>To choose which digital application to use to meet a purpose</p> <p>To explain the design of a web-page and the external links</p> <p>To choose an appropriate online platform to collaborate with others</p> <p>To create a hyperlink to a website on the World Wide Web</p> <p>To use search engines to find appropriate websites using specific keywords</p>	<p>To <u>confidently</u> describe whether I am using something from the internet, school network or a digital device</p> <p>To choose which digital application to use to meet a purpose <u>and explain my choice</u></p> <p>To explain the design of a web-page and the external links <u>by making links with others</u></p> <p>To <u>critically</u> choose an appropriate online platform to collaborate with others <u>and explain my choice</u></p> <p>To <u>confidently and consistently</u> create a hyperlink to a website on the World Wide Web</p>

			<p>To understand and check who owns images and text on the internet</p> <p>To identify key words to use when searching the World Wide Web safely</p>	<p>To use search engines effectively and accurately to find appropriate websites using specific keywords</p> <p>To understand and check who owns images and text on the internet and explain how you know</p> <p>To effectively and accurately identify key words to use when searching the World Wide Web safely</p>
	<p>Online Safety and Appropriate Use</p>	<ul style="list-style-type: none"> To use technology safely, responsibly and respectfully To understand passwords, keep personal information safe To create a safe and secure password To safely send and receive emails 	<p>To use technology safely, responsibly and respectfully</p> <p>To recognise and describe acceptable and unacceptable behaviour online</p> <p>To understand how and why to report content and concerns</p> <p>To describe how online message can be hurtful</p> <p>To explore online plagiarism</p> <p>To explore online games and whether they are age appropriate</p> <p>To create a safe online profile</p> <p>To describe how to be a good digital citizen online and in real life</p>	<p>To use technology safely, responsibly and respectfully with confidence</p> <p>To accurately recognise and confidently describe acceptable and unacceptable behaviour online</p> <p>To understand how and why to report content and concerns in detail</p> <p>To describe how and why online message can be hurtful</p> <p>To explore online plagiarism and why it is important</p> <p>To critically explore online games and whether they are age appropriate and explain why</p> <p>To effectively create a safe and secure online profile</p> <p>To describe how to be a good digital citizen online and in real life by making comparisons between reality and virtual</p>

SUMMER UNIT	Key generic learning objectives	Unit specific learning objectives	Lower KS2 working at the EXPECTED STANDARD	Lower KS2 working ABOVE the expected standard
<p>What I Believe: The right to choose religion and beliefs [exploring</p>	<p>Understanding and Creating Algorithms</p>	<ul style="list-style-type: none"> To use appropriate programming software or app to achieve specific outcomes To debug programs and keep testing a program until it achieves a specific goal To evaluate the effectiveness of a program 	<p>To use logical reasoning to decompose an open-ended problem into smaller parts</p> <p>To use algorithms to solve complex problems</p> <p>To use logical reasoning to simplify a program</p> <p>To explain the input and output to program a robot/software</p> <p>To use a sensor within an algorithm</p>	<p>To effectively use logical reasoning to decompose an open-ended problem into smaller parts and begin to identify patterns</p> <p>To use precise, accurate and logical algorithms to solve complex problems</p> <p>To use logical reasoning to simplify a program consistently and effectively</p>

<p>religion around the world]</p>			<p>To use a variety of commands to create a precise program</p> <p>To detect errors in an algorithm and debug an algorithm using abstraction</p> <p>To evaluate the effectiveness of a program and why a program is suitable</p>	<p>To explain the input and output to program a robot/software <u>and explain how the input affects the output</u></p> <p>To <u>confidently</u> use a sensor within an algorithm</p> <p>To use a variety of commands to create a precise program <u>with greater accuracy and consistency</u></p> <p>To <u>accurately</u> detect errors in an algorithm and <u>precisely</u> debug an algorithm using abstraction</p> <p>To evaluate the effectiveness of a program and why a program is suitable <u>and unsuitable to achieve a specific outcome</u></p>
	<p>Digital Content and the Internet</p>	<ul style="list-style-type: none"> To effectively use information that I have found on the internet To be creative when creating work online using a range of different effects (font, letter size, colour, etc.) To use appropriate keyboard commands to amend text (capitalisation, paragraphs, etc.) To use the spellcheck tool To save, store and retrieve work on an online platform or school network To create a database and add data to it To describe different ways data can be organised digitally (charts/graphs) To search a ready-made database to gather information To create a branching database using digital tools 	<p>To create work using a range of text, pictorial and audio for a specific purpose and audience</p> <p>To modify a template and use a range of tools to create a piece of work for a specific purpose</p> <p>To critically evaluate the effectiveness of my work</p> <p>To begin to use transitions and animations when creating presentations</p> <p>To confidently use information, I have found on the internet and check its reliability</p> <p>To use technology creatively when creating work online using a range of different effects appropriately (font, letter size, colour, etc.)</p> <p>To use a keyboard confidently and use spellchecker to review my work</p> <p>To change the appearance of text to increase its effectiveness for a specific purpose</p> <p>To save, store and retrieve work on an online platform or school network</p> <p>To describe and explain different ways data can be organised digitally for different purposes (charts/graphs)</p> <p>To plan, create and search a database to answer questions</p> <p>I can collect data and identify when data could be inaccurate</p> <p>To collect data for a specific purpose and present data using an appropriate way</p>	<p>To <u>effectively</u> create work using a range of text, pictorial and audio for a specific purpose and audience</p> <p>To <u>effectively</u> modify a template and <u>confidently</u> use a range of tools to create a piece of work for a specific purpose</p> <p>To critically evaluate the effectiveness of my work <u>and why my work is good and how I could improve it</u></p> <p>To to use transitions and animations when creating presentations</p> <p>To confidently use information, I have found on the internet and check its reliability <u>with increasing confidence</u></p> <p>To <u>effectively</u> use technology creatively when creating work online using a range of different effects appropriately (font, letter size, colour, etc.) <u>with confidence</u></p> <p>To use a keyboard confidently and <u>effectively</u> use spellchecker to review my work</p> <p>To <u>effectively and consistently</u> change the appearance of text to increase its effectiveness for a specific purpose</p> <p>To <u>confidently and consistently</u> save, store and retrieve work on an online platform or school network <u>without adult support</u></p> <p>To <u>confidently</u> describe and explain different ways data can be organised digitally for different purposes (charts/graphs) <u>and why data is presented in a specific way</u></p>

				<p>To logically and effectively plan, create and search a database to answer questions</p> <p>To confidently collect data and consistently identify when data could be inaccurate</p> <p>To confidently collect data for a specific purpose and present data effectively using an appropriate way</p>
Understanding the Application of IT	<ul style="list-style-type: none"> To describe the World Wide Web as part of the internet that contains websites To use search engines to find appropriate websites To evaluate if an image from online is appropriate for a specific purpose 	<p>To describe whether I am using something from the internet, school network or a digital device</p> <p>To choose which digital application to use to meet a purpose</p> <p>To explain the design of a web-page and the external links</p> <p>To choose an appropriate online platform to collaborate with others</p> <p>To create a hyperlink to a website on the World Wide Web</p> <p>To use search engines to find appropriate websites using specific keywords</p> <p>To understand and check who owns images and text on the internet</p> <p>To identify key words to use when searching the World Wide Web safely</p>	<p>To confidently describe whether I am using something from the internet, school network or a digital device</p> <p>To choose which digital application to use to meet a purpose and explain my choice</p> <p>To explain the design of a web-page and the external links by making links with others</p> <p>To critically choose an appropriate online platform to collaborate with others and explain my choice</p> <p>To confidently and consistently create a hyperlink to a website on the World Wide Web</p> <p>To use search engines effectively and accurately to find appropriate websites using specific Keywords</p> <p>To understand and check who owns images and text on the internet and explain how you know</p> <p>To effectively and accurately identify key words to use when searching the World Wide Web safely</p>	<p>To logically and effectively plan, create and search a database to answer questions</p> <p>To confidently collect data and consistently identify when data could be inaccurate</p> <p>To confidently collect data for a specific purpose and present data effectively using an appropriate way</p> <p>To confidently describe whether I am using something from the internet, school network or a digital device</p> <p>To choose which digital application to use to meet a purpose and explain my choice</p> <p>To explain the design of a web-page and the external links by making links with others</p> <p>To critically choose an appropriate online platform to collaborate with others and explain my choice</p> <p>To confidently and consistently create a hyperlink to a website on the World Wide Web</p> <p>To use search engines effectively and accurately to find appropriate websites using specific Keywords</p> <p>To understand and check who owns images and text on the internet and explain how you know</p> <p>To effectively and accurately identify key words to use when searching the World Wide Web safely</p>
Online Safety and Appropriate Use	<ul style="list-style-type: none"> To use technology safely, responsibly and respectfully To identify online advertisements and their purpose To describe how to be a good digital citizen 	<p>To use technology safely, responsibly and respectfully</p> <p>To recognise and describe acceptable and unacceptable behaviour online</p> <p>To understand how and why to report content and concerns</p> <p>To describe how online message can be hurtful</p> <p>To explore online plagiarism</p> <p>To explore online games and whether they are age appropriate</p> <p>To create a safe online profile</p> <p>To describe how to be a good digital citizen online and in real life</p>	<p>To use technology safely, responsibly and respectfully</p> <p>To accurately recognise and confidently describe acceptable and unacceptable behaviour online</p> <p>To understand how and why to report content and concerns in detail</p> <p>To describe how and why online message can be hurtful</p> <p>To explore online plagiarism and why it is important</p> <p>To critically explore online games and whether they are age appropriate and explain why</p> <p>To effectively create a safe and secure online profile</p>	<p>To use technology safely, responsibly and respectfully with confidence</p> <p>To accurately recognise and confidently describe acceptable and unacceptable behaviour online</p> <p>To understand how and why to report content and concerns in detail</p> <p>To describe how and why online message can be hurtful</p> <p>To explore online plagiarism and why it is important</p> <p>To critically explore online games and whether they are age appropriate and explain why</p> <p>To effectively create a safe and secure online profile</p>

				To describe how to be a good digital citizen online and in real life <u>by making comparisons between reality and virtual</u>
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YEAR 4

AUTUMN UNIT	Key generic learning objectives	Unit specific learning objectives	Lower KS2 working at the EXPECTED STANDARD	Lower KS2 working ABOVE the expected standard
The Ancient Greeks	Understanding and Creating Algorithms	<ul style="list-style-type: none"> To use logical reasoning to decompose an open-ended problem into smaller parts To use algorithms to solve complex problems 	<p>To use logical reasoning to decompose an open-ended problem into smaller parts</p> <p>To use algorithms to solve complex problems</p> <p>To use logical reasoning to simplify a program</p> <p>To explain the input and output to program a robot/software</p> <p>To use a sensor within an algorithm</p> <p>To use a variety of commands to create a precise program</p> <p>To detect errors in an algorithm and debug an algorithm using abstraction</p> <p>To evaluate the effectiveness of a program and why a program is suitable</p>	<p>To <u>effectively</u> use logical reasoning to decompose an open-ended problem into smaller parts <u>and begin to identify patterns</u></p> <p>To use <u>precise, accurate and logical</u> algorithms to solve complex problems</p> <p>To use logical reasoning to simplify a program <u>consistently and effectively</u></p> <p>To explain the input and output to program a robot/software <u>and explain how the input affects the output</u></p> <p>To <u>confidently</u> use a sensor within an algorithm</p> <p>To use a variety of commands to create a precise program <u>with greater accuracy and consistency</u></p> <p>To <u>accurately</u> detect errors in an algorithm and <u>precisely</u> debug an algorithm using abstraction</p>

				<p>To evaluate the effectiveness of a program and why a program is suitable and unsuitable to achieve a specific outcome</p>
	<p>Digital Content and the Internet</p>	<ul style="list-style-type: none"> • To create work using a range of text, pictorial and audio for a specific purpose and audience • To modify a template and use a range of tools to create a piece of work for a specific purpose • To critically evaluate the effectiveness of my work • To begin to use transitions and animations when creating presentations • To effectively use information, I have found on the internet and check its reliability • To use technology creatively when creating work online using a range of different effects appropriately (font, letter size, colour, etc.) • To use a keyboard confidently and use spellchecker to review my work • To change the appearance of text to increase its effectiveness for a specific purpose • To save, store and retrieve work on an online platform or school network 	<p>To create work using a range of text, pictorial and audio for a specific purpose and audience</p> <p>To modify a template and use a range of tools to create a piece of work for a specific purpose</p> <p>To critically evaluate the effectiveness of my work</p> <p>To begin to use transitions and animations when creating presentations</p> <p>To confidently use information, I have found on the internet and check its reliability</p> <p>To use technology creatively when creating work online using a range of different effects appropriately (font, letter size, colour, etc.)</p> <p>To use a keyboard confidently and use spellchecker to review my work</p> <p>To change the appearance of text to increase its effectiveness for a specific purpose</p> <p>To save, store and retrieve work on an online platform or school network</p> <p>To describe and explain different ways data can be organised digitally for different purposes (charts/graphs)</p> <p>To plan, create and search a database to answer questions</p> <p>I can collect data and identify when data could be inaccurate</p> <p>To collect data for a specific purpose and present data using an appropriate way</p>	<p>To effectively create work using a range of text, pictorial and audio for a specific purpose and audience</p> <p>To effectively modify a template and confidently use a range of tools to create a piece of work for a specific purpose</p> <p>To critically evaluate the effectiveness of my work and why my work is good and how I could improve it</p> <p>To to use transitions and animations when creating presentations</p> <p>To confidently use information, I have found on the internet and check its reliability with increasing confidence</p> <p>To effectively use technology creatively when creating work online using a range of different effects appropriately (font, letter size, colour, etc.) with confidence</p> <p>To use a keyboard confidently and effectively use spellchecker to review my work</p> <p>To effectively and consistently change the appearance of text to increase its effectiveness for a specific purpose</p> <p>To confidently and consistently save, store and retrieve work on an online platform or school network without adult support</p> <p>To confidently describe and explain different ways data can be organised digitally for different purposes (charts/graphs) and why data is presented in a specific way</p> <p>To logically and effectively plan, create and search a database to answer questions</p> <p>To confidently collect data and consistently identify when data could be inaccurate</p> <p>To confidently collect data for a specific purpose and present data effectively using an appropriate way</p>

	<h3>Understanding the Application of IT</h3>	<ul style="list-style-type: none"> To describe whether I am using something from the internet, school network or a digital device To choose which digital application to use to meet a purpose To use search engines to find appropriate websites using specific keywords To understand and check who owns images and text on the internet To identify key words to use when searching the World Wide Web safely 	<p>To describe whether I am using something from the internet, school network or a digital device</p> <p>To choose which digital application to use to meet a purpose</p> <p>To explain the design of a web-page and the external links</p> <p>To choose an appropriate online platform to collaborate with others</p> <p>To create a hyperlink to a website on the World Wide Web</p> <p>To use search engines to find appropriate websites using specific keywords</p> <p>To understand and check who owns images and text on the internet</p> <p>To identify key words to use when searching the World Wide Web safely</p>	<p>To confidently describe whether I am using something from the internet, school network or a digital device</p> <p>To choose which digital application to use to meet a purpose and explain my choice</p> <p>To explain the design of a web-page and the external links by making links with others</p> <p>To critically choose an appropriate online platform to collaborate with others and explain my choice</p> <p>To confidently and consistently create a hyperlink to a website on the World Wide Web</p> <p>To use search engines effectively and accurately to find appropriate websites using specific keywords</p> <p>To understand and check who owns images and text on the internet and explain how you know</p> <p>To effectively and accurately identify key words to use when searching the World Wide Web safely</p>
	<h3>Online Safety and Appropriate Use</h3>	<ul style="list-style-type: none"> To use technology safely, responsibly and respectfully To recognise and describe acceptable and unacceptable behaviour online To understand how and why to report content and concerns To describe how online message can be hurtful To explore online games and whether they are age appropriate 	<p>To use technology safely, responsibly and respectfully</p> <p>To recognise and describe acceptable and unacceptable behaviour online</p> <p>To understand how and why to report content and concerns</p> <p>To describe how online message can be hurtful</p> <p>To explore online plagiarism</p> <p>To explore online games and whether they are age appropriate</p> <p>To create a safe online profile</p> <p>To describe how to be a good digital citizen online and in real life</p>	<p>To use technology safely, responsibly and respectfully with confidence</p> <p>To accurately recognise and confidently describe acceptable and unacceptable behaviour online</p> <p>To understand how and why to report content and concerns in detail</p> <p>To describe how and why online message can be hurtful</p> <p>To explore online plagiarism and why it is important</p> <p>To critically explore online games and whether they are age appropriate and explain why</p> <p>To effectively create a safe and secure online profile</p> <p>To describe how to be a good digital citizen online and in real life by making comparisons between reality and virtual</p>

SPRING UNIT	Key generic learning objectives	Unit specific learning objectives	Lower KS2 working at the EXPECTED STANDARD	Lower KS2 working ABOVE the expected standard
What did the Roman's do for us?	Understanding and Creating Algorithms	<ul style="list-style-type: none"> To use logical reasoning to simplify a program To explain the input and output to program a robot/software To use a sensor within an algorithm 	<p>To use logical reasoning to decompose an open-ended problem into smaller parts</p> <p>To use algorithms to solve complex problems</p> <p>To use logical reasoning to simplify a program</p> <p>To explain the input and output to program a robot/software</p> <p>To use a sensor within an algorithm</p> <p>To use a variety of commands to create a precise program</p> <p>To detect errors in an algorithm and debug an algorithm using abstraction</p> <p>To evaluate the effectiveness of a program and why a program is suitable</p>	<p>To effectively use logical reasoning to decompose an open-ended problem into smaller parts and begin to identify patterns</p> <p>To use precise, accurate and logical algorithms to solve complex problems</p> <p>To use logical reasoning to simplify a program consistently and effectively</p> <p>To explain the input and output to program a robot/software and explain how the input affects the output</p> <p>To confidently use a sensor within an algorithm</p> <p>To use a variety of commands to create a precise program with greater accuracy and consistency</p> <p>To accurately detect errors in an algorithm and precisely debug an algorithm using abstraction</p> <p>To evaluate the effectiveness of a program and why a program is suitable and unsuitable to achieve a specific outcome</p>
	Digital Content and the Internet	<ul style="list-style-type: none"> To create work using a range of text, pictorial and audio for a specific purpose and audience To modify a template and use a range of tools to create a piece of work for a specific purpose To critically evaluate the effectiveness of my work To begin to use transitions and animations when creating presentations To effectively use information, I have found on the internet and check its reliability To use technology creatively when creating work online using a range of different effects appropriately (font, letter size, colour, etc.) To use a keyboard confidently and use spellchecker to review my work To change the appearance of text to increase its effectiveness for a specific purpose 	<p>To create work using a range of text, pictorial and audio for a specific purpose and audience</p> <p>To modify a template and use a range of tools to create a piece of work for a specific purpose</p> <p>To critically evaluate the effectiveness of my work</p> <p>To begin to use transitions and animations when creating presentations</p> <p>To confidently use information, I have found on the internet and check its reliability</p> <p>To use technology creatively when creating work online using a range of different effects appropriately (font, letter size, colour, etc.)</p>	<p>To effectively create work using a range of text, pictorial and audio for a specific purpose and audience</p> <p>To effectively modify a template and confidently use a range of tools to create a piece of work for a specific purpose</p> <p>To critically evaluate the effectiveness of my work and why my work is good and how I could improve it</p> <p>To to use transitions and animations when creating presentations</p> <p>To confidently use information, I have found on the internet and check its reliability with increasing confidence</p>

		<ul style="list-style-type: none"> To save, store and retrieve work on an online platform or school network 	<p>To use a keyboard confidently and use spellchecker to review my work</p> <p>To change the appearance of text to increase its effectiveness for a specific purpose</p> <p>To save, store and retrieve work on an online platform or school network</p> <p>To describe and explain different ways data can be organised digitally for different purposes (charts/graphs)</p> <p>To plan, create and search a database to answer questions</p> <p>I can collect data and identify when data could be inaccurate</p> <p>To collect data for a specific purpose and present data using an appropriate way</p>	<p>To effectively use technology creatively when creating work online using a range of different effects appropriately (font, letter size, colour, etc.) with confidence</p> <p>To use a keyboard confidently and effectively use spellchecker to review my work</p> <p>To effectively and consistently change the appearance of text to increase its effectiveness for a specific purpose</p> <p>To confidently and consistently save, store and retrieve work on an online platform or school network without adult support</p> <p>To confidently describe and explain different ways data can be organised digitally for different purposes (charts/graphs) and why data is presented in a specific way</p> <p>To logically and effectively plan, create and search a database to answer questions</p> <p>To confidently collect data and consistently identify when data could be inaccurate</p> <p>To confidently collect data for a specific purpose and present data effectively using an appropriate way</p>
	<p>Understanding the Application of IT</p>	<ul style="list-style-type: none"> To choose which digital application to use to meet a purpose To explain the design of a web-page and the external links To create a hyperlink to a website on the World Wide Web To use search engines to find appropriate websites using specific keywords To identify key words to use when searching the World Wide Web safely 	<p>To describe whether I am using something from the internet, school network or a digital device</p> <p>To choose which digital application to use to meet a purpose</p> <p>To explain the design of a web-page and the external links</p> <p>To choose an appropriate online platform to collaborate with others</p> <p>To create a hyperlink to a website on the World Wide Web</p> <p>To use search engines to find appropriate websites using specific keywords</p> <p>To understand and check who owns images and text on the internet</p> <p>To identify key words to use when searching the World Wide Web safely</p>	<p>To confidently describe whether I am using something from the internet, school network or a digital device</p> <p>To choose which digital application to use to meet a purpose and explain my choice</p> <p>To explain the design of a web-page and the external links by making links with others</p> <p>To critically choose an appropriate online platform to collaborate with others and explain my choice</p> <p>To confidently and consistently create a hyperlink to a website on the World Wide Web</p> <p>To use search engines effectively and accurately to find appropriate websites using specific keywords</p> <p>To understand and check who owns images and text on the internet and explain how you know</p> <p>To effectively and accurately identify key words to use when searching the World Wide Web safely</p>

	<h2>Online Safety and Appropriate Use</h2>	<ul style="list-style-type: none"> To use technology safely, responsibly and respectfully To explore online plagiarism 	<p>To use technology safely, responsibly and respectfully</p> <p>To recognise and describe acceptable and unacceptable behaviour online</p> <p>To understand how and why to report content and concerns</p> <p>To describe how online message can be hurtful</p> <p>To explore online plagiarism</p> <p>To explore online games and whether they are age appropriate</p> <p>To create a safe online profile</p> <p>To describe how to be a good digital citizen online and in real life</p>	<p>To use technology safely, responsibly and respectfully <u>with confidence</u></p> <p>To <u>accurately</u> recognise and <u>confidently</u> describe acceptable and unacceptable behaviour online</p> <p>To understand how and why to report content and concerns <u>in detail</u></p> <p>To describe how <u>and why</u> online message can be hurtful</p> <p>To explore online plagiarism <u>and why it is important</u></p> <p>To <u>critically</u> explore online games and whether they are age appropriate <u>and explain why</u></p> <p>To <u>effectively</u> create a safe <u>and secure</u> online profile</p> <p>To describe how to be a good digital citizen online and in real life <u>by making comparisons between reality and virtual</u></p>
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SUMMER UNIT	Key generic learning objectives	Unit specific learning objectives	Lower KS2 working at the EXPECTED STANDARD	Lower KS2 working ABOVE the expected standard
<p>What I believe: Everyone and everything has the right to be alive.</p> <p>Life in the rainforest.</p>	<h3>Understanding and Creating Algorithms</h3>	<ul style="list-style-type: none"> To use a variety of commands to create a precise program To detect errors in an algorithm and debug an algorithm using abstraction To evaluate the effectiveness of a program and why a program is suitable 	<p>To use logical reasoning to decompose an open-ended problem into smaller parts</p> <p>To use algorithms to solve complex problems</p> <p>To use logical reasoning to simplify a program</p> <p>To explain the input and output to program a robot/software</p> <p>To use a sensor within an algorithm</p> <p>To use a variety of commands to create a precise program</p> <p>To detect errors in an algorithm and debug an algorithm using abstraction</p> <p>To evaluate the effectiveness of a program and why a program is suitable</p>	<p>To <u>effectively</u> use logical reasoning to decompose an open-ended problem into smaller parts <u>and begin to identify patterns</u></p> <p>To use <u>precise, accurate and logical</u> algorithms to solve complex problems</p> <p>To use logical reasoning to simplify a program <u>consistently and effectively</u></p> <p>To explain the input and output to program a robot/software <u>and explain how the input affects the output</u></p> <p>To <u>confidently</u> use a sensor within an algorithm</p> <p>To use a variety of commands to create a precise program <u>with greater accuracy and consistency</u></p> <p>To <u>accurately</u> detect errors in an algorithm and <u>precisely</u> debug an algorithm using abstraction</p>

				<p>To evaluate the effectiveness of a program and why a program is suitable <u>and unsuitable to achieve a specific outcome</u></p>
	<h2>Digital Content and the Internet</h2>	<ul style="list-style-type: none"> To effectively use information, I have found on the internet and check its reliability To use technology creatively when creating work online using a range of different effects appropriately (font, letter size, colour, etc.) To use a keyboard confidently and use spellchecker to review my work To change the appearance of text to increase its effectiveness for a specific purpose To save, store and retrieve work on an online platform or school network To describe and explain different ways data can be organised digitally for different purposes (charts/graphs) To plan, create and search a database to answer questions To can collect data and identify when data could be inaccurate To collect data for a specific purpose and present data using an appropriate way 	<p>To create work using a range of text, pictorial and audio for a specific purpose and audience</p> <p>To modify a template and use a range of tools to create a piece of work for a specific purpose</p> <p>To critically evaluate the effectiveness of my work</p> <p>To begin to use transitions and animations when creating presentations</p> <p>To confidently use information, I have found on the internet and check its reliability</p> <p>To use technology creatively when creating work online using a range of different effects appropriately (font, letter size, colour, etc.)</p> <p>To use a keyboard confidently and use spellchecker to review my work</p> <p>To change the appearance of text to increase its effectiveness for a specific purpose</p> <p>To save, store and retrieve work on an online platform or school network</p> <p>To describe and explain different ways data can be organised digitally for different purposes (charts/graphs)</p> <p>To plan, create and search a database to answer questions</p> <p>I can collect data and identify when data could be inaccurate</p> <p>To collect data for a specific purpose and present data using an appropriate way</p>	<p>To <u>effectively</u> create work using a range of text, pictorial and audio for a specific purpose and audience</p> <p>To <u>effectively</u> modify a template and <u>confidently</u> use a range of tools to create a piece of work for a specific purpose</p> <p>To critically evaluate the effectiveness of my work <u>and why my work is good and how I could improve it</u></p> <p>To to use transitions and animations when creating presentations</p> <p>To confidently use information, I have found on the internet and check its reliability <u>with increasing confidence</u></p> <p>To <u>effectively</u> use technology creatively when creating work online using a range of different effects appropriately (font, letter size, colour, etc.) <u>with confidence</u></p> <p>To use a keyboard confidently and <u>effectively</u> use spellchecker to review my work</p> <p>To <u>effectively and consistently</u> change the appearance of text to increase its effectiveness for a specific purpose</p> <p>To <u>confidently and consistently</u> save, store and retrieve work on an online platform or school network <u>without adult support</u></p> <p>To <u>confidently</u> describe and explain different ways data can be organised digitally for different purposes (charts/graphs) <u>and why data is presented in a specific way</u></p> <p>To <u>logically and effectively</u> plan, create and search a database to answer questions</p> <p>To <u>confidently</u> collect data and <u>consistently</u> identify when data could be inaccurate</p> <p>To <u>confidently</u> collect data for a specific purpose and present data <u>effectively</u> using an appropriate way</p>

	<h3>Understanding the Application of IT</h3>	<ul style="list-style-type: none"> To choose which digital application to use to meet a purpose To choose an appropriate online platform to collaborate with others To use search engines to find appropriate websites using specific keywords To identify key words to use when searching the World Wide Web safely 	<p>To describe whether I am using something from the internet, school network or a digital device</p> <p>To choose which digital application to use to meet a purpose</p> <p>To explain the design of a web-page and the external links</p> <p>To choose an appropriate online platform to collaborate with others</p> <p>To create a hyperlink to a website on the World Wide Web</p> <p>To use search engines to find appropriate websites using specific keywords</p> <p>To understand and check who owns images and text on the internet</p> <p>To identify key words to use when searching the World Wide Web safely</p>	<p>To confidently describe whether I am using something from the internet, school network or a digital device</p> <p>To choose which digital application to use to meet a purpose and explain my choice</p> <p>To explain the design of a web-page and the external links by making links with others</p> <p>To critically choose an appropriate online platform to collaborate with others and explain my choice</p> <p>To confidently and consistently create a hyperlink to a website on the World Wide Web</p> <p>To use search engines effectively and accurately to find appropriate websites using specific keywords</p> <p>To understand and check who owns images and text on the internet and explain how you know</p> <p>To effectively and accurately identify key words to use when searching the World Wide Web safely</p>
	<h3>Online Safety and Appropriate Use</h3>	<ul style="list-style-type: none"> To use technology safely, responsibly and respectfully To create a safe online profile To describe how to be a good digital citizen online and in real life 	<p>To use technology safely, responsibly and respectfully</p> <p>To recognise and describe acceptable and unacceptable behaviour online</p> <p>To understand how and why to report content and concerns</p> <p>To describe how online message can be hurtful</p> <p>To explore online plagiarism</p> <p>To explore online games and whether they are age appropriate</p> <p>To create a safe online profile</p> <p>To describe how to be a good digital citizen online and in real life</p>	<p>To use technology safely, responsibly and respectfully with confidence</p> <p>To accurately recognise and confidently describe acceptable and unacceptable behaviour online</p> <p>To understand how and why to report content and concerns in detail</p> <p>To describe how and why online message can be hurtful</p> <p>To explore online plagiarism and why it is important</p> <p>To critically explore online games and whether they are age appropriate and explain why</p> <p>To effectively create a safe and secure online profile</p> <p>To describe how to be a good digital citizen online and in real life by making comparisons between reality and virtual</p>

AUTUMN UNIT	Key generic learning objectives	Unit specific learning objectives	Upper KS2 working at the EXPECTED STANDARD	Lower KS2 working ABOVE the expected standard
Settlers and Settlements Anglo-Saxon, Vikings and Scots	Understanding and Creating Algorithms	<ul style="list-style-type: none"> To select appropriate commands to create a specific program To use algorithms to solve complex problems using logical reasoning 	<p>To decompose an open-ended problem into smaller parts and recognise patterns between programs to solve a problem</p> <p>To design, write and debug programs that achieve a specific goal</p> <p>To evaluate the effectiveness and efficiency of my algorithm as a whole by continually testing the program</p> <p>To use logical reasoning to detect correct errors in algorithms and programs</p> <p>To recognise the use of a variable to achieve a specific outcome</p> <p>To use a variable and operators to stop a program</p>	<p>To effectively decompose an open-ended problem into smaller parts and consistently recognise patterns between programs to solve a problem</p> <p>To confidently and consistently design, write and debug programs that achieve a specific goal</p> <p>To critically evaluate the effectiveness and efficiency of my algorithm as a whole by continually testing the program</p> <p>To effectively use logical reasoning to confidently detect correct errors in algorithms and programs</p> <p>To confidently recognise the use of a variable to achieve a specific outcome</p> <p>To effectively use a variable and operators to stop a program</p>
	Digital Content and the Internet	<ul style="list-style-type: none"> To create digital content by adding appropriate text, images, sounds and videos to meet a specific purpose To modify an appropriate template and use a range of tools to create a piece of work for a specific purpose To use logical reasoning to evaluate the effectiveness of how to present information To use appropriate information sources to gather digital content To be digitally critical when searching for information online and check its reliability To select, use and combine appropriate digital tools to create effects to enhance my work creatively To use a keyboard with increasing fluency To choose appropriate tools to edit the appearance of text and images to meet a specific purpose To save, store and retrieve work on an appropriate online platform or school network 	<p>To effectively create digital content by adding appropriate text, images, sound and videos to meet a specific purpose</p> <p>To effectively plan the process of using, finding, creating and modifying digital content</p> <p>To use logically reasoning to choose an appropriate template to modify to effectively meet a purpose</p> <p>To be digitally critical when evaluating effectiveness of content</p> <p>To be digitally critical when searching for information online by checking its reliability and plausibility</p> <p>To effectively select, use and combine appropriate digital tools to create effects to enhance my work creatively</p> <p>To use a keyboard with increasing fluency and pace</p> <p>To be digitally critically when choosing appropriate tools to edit the appearance of text and images to meet a specific purpose</p>	<p>To effectively create digital content by adding appropriate text, images, sound and videos to meet a specific purpose consistently and with confidence</p> <p>To effectively and critically plan the process of using, finding, creating and modifying digital content</p> <p>To confidently use logically reasoning to choose an appropriate template to modify to effectively meet a purpose and articulate their how it meets the purpose</p> <p>To be digitally critical when evaluating effectiveness of content by explain and reasoning their understanding of content</p> <p>To be digitally critical when searching for information online by checking its reliability and plausibility consistently</p> <p>To effectively select, use and combine appropriate digital tools to create effects to enhance my work creatively consistently to meet a purpose</p>

			<p>To save, store and retrieve work on an appropriate online platform or school network</p> <p>To effectively create, critically analyse, confidently evaluate and appropriately present data using spreadsheets, databases and graphs</p> <p>To input a range of formulas to create data (adding, averages)</p> <p>To appropriately edit the format of a cell on a database for different purposes</p> <p>To check the plausibility and accuracy of data collected and how it can be interpreted in different ways</p>	<p>To confidently use a keyboard with increasing fluency and pace</p> <p>To be digitally critically when choosing appropriate tools to edit the appearance of text and images to meet a specific purpose and explain why they have edited in a specific way</p> <p>To confidently and consistently save, store and retrieve work on an appropriate online platform or school network and explain why they have saved their work on the appropriate platform</p> <p>To effectively create, critically analyse, confidently evaluate and appropriately present data using spreadsheets, databases and graphs consistently and explain why they have presented data in specific way</p> <p>To input a range of formulas to create data (adding, averages) with confidence</p> <p>To appropriately edit the format of a cell on a database for different purposes with confidence</p> <p>To critically check the plausibility and accuracy of data collected and how it can be interpreted in different ways</p>
	<p>Understanding the Application of IT</p>	<ul style="list-style-type: none"> To choose an appropriate online or offline tool to share and create ideas To understand how to use different online communication tools for different purposes To use a search engine to find appropriate information and check its reliability To recognise and evaluate information found on the internet 	<p>To explain the internet services for different purposes</p> <p>To understand 'copyright' and describe what it means</p> <p>To describe how to acknowledge sources from the internet</p> <p>To describe how information is transported on the internet</p> <p>To understand different types of tools used online and on technologies that can be used for collaboration and communication</p> <p>To use keywords to make effective internet searches and evaluate rankings of websites and digital content</p> <p>To evaluate the reliability of websites</p> <p>To explain how website are ranked and selected based on how they are searched</p>	<p>To effectively explain the internet services for different purposes and why the services are important</p> <p>To confidently understand 'copyright', describe what it means and why it is important</p> <p>To confidently describe how to acknowledge sources from the internet</p> <p>To describe how information is transported on the internet in great detail</p> <p>To understand different types of tools used online and on technologies that can be used for collaboration and communication and compare how we use them</p> <p>To consistently and accurately use keywords to make effective internet searches and critically evaluate rankings of websites and digital content</p> <p>To critically evaluate the reliability of websites</p>

				To confidently explain how website are ranked and selected based on how they are searched by making comparison
	Online Safety and Appropriate Use	<ul style="list-style-type: none"> To use technology safely, responsibly and respectfully To recognise, describe and explain acceptable and unacceptable behaviour online To understand how and why to report content and concerns using a variety of methods To identify what spam emails are and how what to do with them To create strong passwords to protect information 	<p>To use technology safely, responsibly and respectfully</p> <p>To recognise, describe and explain acceptable and unacceptable behaviour online effectively</p> <p>To understand how and why to report content and concerns by explaining the most appropriate method of reporting</p> <p>To compare online bullying to other types of bullying</p> <p>To identify similarities and differences between strategies for online bullying and other types of bullying</p> <p>To recognise secure and insecure websites</p> <p>To understand safe and unsafe information to share with other online</p> <p>To evaluate media aimed at boys and girls</p>	<p>To use technology safely, responsibly and respectfully with confidence</p> <p>To accurately recognise, describe in detail and effectively explain acceptable and unacceptable behaviour online effectively</p> <p>To understand how and why to report content and concerns by explaining the most appropriate method of reporting and reason their actions</p> <p>To critically compare online bullying to other types of bullying focusing on similarities and differences</p> <p>To identify similarities and differences between strategies for online bullying and other types of bullying and which strategies are effective for different situations</p> <p>To accurately recognise secure and insecure websites and explain how secure they are</p> <p>To understand safe and unsafe information to share with other online by critically evaluating the information</p> <p>To critically evaluate media aimed at boys and girls and why they may be similar or different</p>

SPRING UNIT	Key generic learning objectives	Unit specific learning objectives	Upper KS2 working at the EXPECTED STANDARD	Lower KS2 working ABOVE the expected standard
<p>What happened after 1066?</p> <p>Tudors and Stewarts</p>	Understanding and Creating Algorithms	<ul style="list-style-type: none"> To use programs to control and simulate physical systems To refine and design a program using repeat commands effectively To change the input of a program to achieve a different output 	<p>To decompose an open-ended problem into smaller parts and recognise patterns between programs to solve a problem</p> <p>To design, write and debug programs that achieve a specific goal</p> <p>To evaluate the effectiveness and efficiency of my algorithm as a whole by continually testing the program</p> <p>To use logical reasoning to detect correct errors in algorithms and programs</p>	<p>To effectively decompose an open-ended problem into smaller parts and consistently recognise patterns between programs to solve a problem</p> <p>To confidently and consistently design, write and debug programs that achieve a specific goal</p> <p>To critically evaluate the effectiveness and efficiency of my algorithm as a whole by continually testing the program</p>

			<p>To recognise the use of a variable to achieve a specific outcome</p> <p>To use a variable and operators to stop a program</p>	<p>To effectively use logical reasoning to confidently detect correct errors in algorithms and programs</p> <p>To confidently recognise the use of a variable to achieve a specific outcome</p> <p>To effectively use a variable and operators to stop a program</p>
	<h2>Digital Content and the Internet</h2>	<ul style="list-style-type: none"> To create digital content by adding appropriate text, images, sounds and videos to meet a specific purpose To modify an appropriate template and use a range of tools to create a piece of work for a specific purpose To use logical reasoning to evaluate the effectiveness of how to present information To use appropriate information sources to gather digital content To be digitally critical when searching for information online and check its reliability To select, use and combine appropriate digital tools to create effects to enhance my work creatively To use a keyboard with increasing fluency To choose appropriate tools to edit the appearance of text and images to meet a specific purpose To save, store and retrieve work on an appropriate online platform or school network 	<p>To effectively create digital content by adding appropriate text, images, sound and videos to meet a specific purpose</p> <p>To effectively plan the process of using, finding, creating and modifying digital content</p> <p>To use logically reasoning to choose an appropriate template to modify to effectively meet a purpose</p> <p>To be digitally critical when evaluating effectiveness of content</p> <p>To be digitally critical when searching for information online by checking its reliability and plausibility</p> <p>To effectively select, use and combine appropriate digital tools to create effects to enhance my work creatively</p> <p>To use a keyboard with increasing fluency and pace</p> <p>To be digitally critically when choosing appropriate tools to edit the appearance of text and images to meet a specific purpose</p> <p>To save, store and retrieve work on an appropriate online platform or school network</p> <p>To effectively create, critically analyse, confidently evaluate and appropriately present data using spreadsheets, databases and graphs</p> <p>To input a range of formulas to create data (adding, averages)</p> <p>To appropriately edit the format of a cell on a database for different purposes</p> <p>To check the plausibility and accuracy of data collected and how it can be interpreted in different ways</p>	<p>To effectively create digital content by adding appropriate text, images, sound and videos to meet a specific purpose consistently and with confidence</p> <p>To effectively and critically plan the process of using, finding, creating and modifying digital content</p> <p>To confidently use logically reasoning to choose an appropriate template to modify to effectively meet a purpose and articulate their how it meets the purpose</p> <p>To be digitally critical when evaluating effectiveness of content by explain and reasoning their understanding of content</p> <p>To be digitally critical when searching for information online by checking its reliability and plausibility consistently</p> <p>To effectively select, use and combine appropriate digital tools to create effects to enhance my work creatively consistently to meet a purpose</p> <p>To confidently use a keyboard with increasing fluency and pace</p> <p>To be digitally critically when choosing appropriate tools to edit the appearance of text and images to meet a specific purpose and explain why they have edited in a specific way</p> <p>To confidently and consistently save, store and retrieve work on an appropriate online platform or school network and explain why they have saved their work on the appropriate platform</p> <p>To effectively create, critically analyse, confidently evaluate and appropriately present data using spreadsheets, databases and graphs</p>

				<p><u>consistently and explain why they have presented data in specific way</u></p> <p>To input a range of formulas to create data (adding, averages) <u>with confidence</u></p> <p>To appropriately edit the format of a cell on a database for different purposes <u>with confidence</u></p> <p>To <u>critically</u> check the plausibility and accuracy of data collected and how it can be interpreted in different ways</p>
	<p>Understanding the Application of IT</p>	<ul style="list-style-type: none"> To describe the different parts of the internet To use a search engine to find appropriate information and check its reliability To recognise and evaluate information found on the internet 	<p>To explain the internet services for different purposes</p> <p>To understand 'copyright' and describe what it means</p> <p>To describe how to acknowledge sources from the internet</p> <p>To describe how information is transported on the internet</p> <p>To understand different types of tools used online and on technologies that can be used for collaboration and communication</p> <p>To use keywords to make effective internet searches and evaluate rankings of websites and digital content</p> <p>To evaluate the reliability of websites</p> <p>To explain how website are ranked and selected based on how they are searched</p>	<p>To <u>effectively</u> explain the internet services for different purposes <u>and why the services are important</u></p> <p>To <u>confidently</u> understand 'copyright', describe what it means <u>and why it is important</u></p> <p>To <u>confidently</u> describe how to acknowledge sources from the internet</p> <p>To describe how information is transported on the internet <u>in great detail</u></p> <p>To understand different types of tools used online and on technologies that can be used for collaboration and communication <u>and compare how we use them</u></p> <p>To <u>consistently and accurately</u> use keywords to make effective internet searches and <u>critically</u> evaluate rankings of websites and digital content</p> <p>To <u>critically</u> evaluate the reliability of websites</p> <p>To <u>confidently</u> explain how website are ranked and selected based on how they are searched <u>by making comparison</u></p>
	<p>Online Safety and Appropriate Use</p>	<ul style="list-style-type: none"> To use technology safely, responsibly and respectfully To recognise, describe and explain acceptable and unacceptable behaviour online To understand how and why to report content and concerns using a variety of methods To write citations for websites to understand the source of information 	<p>To use technology safely, responsibly and respectfully</p> <p>To recognise, describe and explain acceptable and unacceptable behaviour online effectively</p> <p>To understand how and why to report content and concerns by explaining the most appropriate method of reporting</p> <p>To compare online bullying to other types of bullying</p> <p>To identify similarities and differences between strategies for online bullying and other types of bullying</p>	<p>To use technology safely, responsibly and respectfully <u>with confidence</u></p> <p>To <u>accurately</u> recognise, describe <u>in detail</u> and <u>effectively</u> explain acceptable and unacceptable behaviour online effectively</p> <p>To understand how and why to report content and concerns by explaining the most appropriate method of reporting <u>and reason their actions</u></p> <p>To <u>critically</u> compare online bullying to other types of bullying <u>focusing on similarities and differences</u></p>

			<p>To recognise secure and insecure websites</p> <p>To understand safe and unsafe information to share with other online</p> <p>To evaluate media aimed at boys and girls</p>	<p>To identify similarities and differences between strategies for online bullying and other types of bullying <u>and which strategies are effective for different situations</u></p> <p>To <u>accurately</u> recognise secure and insecure websites <u>and explain how secure they are</u></p> <p>To understand safe and unsafe information to share with other online <u>by critically evaluating the information</u></p> <p>To <u>critically</u> evaluate media aimed at boys and girls <u>and why they may be similar or different</u></p>
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SUMMER UNIT	Key generic learning objectives	Unit specific learning objectives	Upper KS2 working at the EXPECTED STANDARD	Lower KS2 working ABOVE the expected standard
<p>What I believe: No one is allowed to punish you in a cruel or harmful way. Exploring crime and punishment.</p>	<p>Understanding and Creating Algorithms</p>	<ul style="list-style-type: none"> To use a variable to increase the possibility of programming To use 'if' and 'then' command in an algorithm To use logical reasoning to detect errors in an algorithm and debug an algorithm 	<p>To decompose an open-ended problem into smaller parts and recognise patterns between programs to solve a problem</p> <p>To design, write and debug programs that achieve a specific goal</p> <p>To evaluate the effectiveness and efficiency of my algorithm as a whole by continually testing the program</p> <p>To use logical reasoning to detect correct errors in algorithms and programs</p> <p>To recognise the use of a variable to achieve a specific outcome</p> <p>To use a variable and operators to stop a program</p>	<p>To <u>effectively</u> decompose an open-ended problem into smaller parts and <u>consistently</u> recognise patterns between programs to solve a problem</p> <p>To <u>confidently and consistently</u> design, write and debug programs that achieve a specific goal</p> <p>To <u>critically</u> evaluate the effectiveness and efficiency of my algorithm as a whole by continually testing the program</p> <p>To <u>effectively</u> use logical reasoning to <u>confidently</u> detect correct errors in algorithms and programs</p> <p>To <u>confidently</u> recognise the use of a variable to achieve a specific outcome</p> <p>To <u>effectively</u> use a variable and operators to stop a program</p>
	<p>Digital Content and the Internet</p>	<ul style="list-style-type: none"> To use appropriate information sources to gather digital content To be digitally critical when searching for information online and check its reliability To select, use and combine appropriate digital tools to create effects to enhance my work creatively To use a keyboard with increasing fluency 	<p>To effectively create digital content by adding appropriate text, images, sound and videos to meet a specific purpose</p> <p>To effectively plan the process of using, finding, creating and modifying digital content</p>	<p>To effectively create digital content by adding appropriate text, images, sound and videos to meet a specific purpose <u>consistently and with confidence</u></p> <p>To effectively <u>and critically</u> plan the process of using, finding, creating and modifying digital content</p>

		<ul style="list-style-type: none"> To choose appropriate tools to edit the appearance of text and images to meet a specific purpose To save, store and retrieve work on an appropriate online platform or school network To use spreadsheets and databases to collect, record and analyse data To choose an appropriate way to present data and explain why To search a database using different operators to refine my search To edit data to amend inaccuracies To begin input a range of formulas to create data (adding) To edit the format of a cell on a database 	<p>To use logically reasoning to choose an appropriate template to modify to effectively meet a purpose</p> <p>To be digitally critical when evaluating effectiveness of content</p> <p>To be digitally critical when searching for information online by checking its reliability and plausibility</p> <p>To effectively select, use and combine appropriate digital tools to create effects to enhance my work creatively</p> <p>To use a keyboard with increasing fluency and pace</p> <p>To be digitally critically when choosing appropriate tools to edit the appearance of text and images to meet a specific purpose</p> <p>To save, store and retrieve work on an appropriate online platform or school network</p> <p>To effectively create, critically analyse, confidently evaluate and appropriately present data using spreadsheets, databases and graphs</p> <p>To input a range of formulas to create data (adding, averages)</p> <p>To appropriately edit the format of a cell on a database for different purposes</p> <p>To check the plausibility and accuracy of data collected and how it can be interpreted in different ways</p>	<p>To <u>confidently</u> use logically reasoning to choose an appropriate template to modify to effectively meet a purpose <u>and articulate their how it meets the purpose</u></p> <p>To be digitally critical when evaluating effectiveness of content <u>by explain and reasoning their understanding of content</u></p> <p>To be digitally critical when searching for information online by checking its reliability and plausibility <u>consistently</u></p> <p>To effectively select, use and combine appropriate digital tools to create effects to enhance my work creatively <u>consistently to meet a purpose</u></p> <p>To <u>confidently</u> use a keyboard with increasing fluency and pace</p> <p>To be digitally critically when choosing appropriate tools to edit the appearance of text and images to meet a specific purpose <u>and explain why they have edited in a specific way</u></p> <p>To <u>confidently and consistently</u> save, store and retrieve work on an appropriate online platform or school network <u>and explain why they have saved their work on the appropriate platform</u></p> <p>To effectively create, critically analyse, confidently evaluate and appropriately present data using spreadsheets, databases and graphs <u>consistently and explain why they have presented data in specific way</u></p> <p>To input a range of formulas to create data (adding, averages) <u>with confidence</u></p> <p>To appropriately edit the format of a cell on a database for different purposes <u>with confidence</u></p> <p>To <u>critically</u> check the plausibility and accuracy of data collected and how it can be interpreted in different ways</p>
	<p>Understanding the Application of IT</p>	<ul style="list-style-type: none"> To describe the different parts of a webpage and how they work To use a search engine to find appropriate information and check its reliability To recognise and evaluate information found on the internet 	<p>To explain the internet services for different purposes</p> <p>To understand 'copyright' and describe what it means</p> <p>To describe how to acknowledge sources from the internet</p>	<p>To <u>effectively</u> explain the internet services for different purposes <u>and why the services are important</u></p> <p>To <u>confidently</u> understand 'copyright', describe what it means <u>and why it is important</u></p>

			<p>To describe how information is transported on the internet</p> <p>To understand different types of tools used online and on technologies that can be used for collaboration and communication</p> <p>To use keywords to make effective internet searches and evaluate rankings of websites and digital content</p> <p>To evaluate the reliability of websites</p> <p>To explain how website are ranked and selected based on how they are searched</p>	<p>To confidently describe how to acknowledge sources from the internet</p> <p>To describe how information is transported on the internet in great detail</p> <p>To understand different types of tools used online and on technologies that can be used for collaboration and communication and compare how we use them</p> <p>To consistently and accurately use keywords to make effective internet searches and critically evaluate rankings of websites and digital content</p> <p>To critically evaluate the reliability of websites</p> <p>To confidently explain how website are ranked and selected based on how they are searched by making comparison</p>
	<p>Online Safety and Appropriate Use</p>	<ul style="list-style-type: none"> To use technology safely, responsibly and respectfully To understand how photos online can be edited and their reliability To critically evaluate content on the internet 	<p>To use technology safely, responsibly and respectfully</p> <p>To recognise, describe and explain acceptable and unacceptable behaviour online effectively</p> <p>To understand how and why to report content and concerns by explaining the most appropriate method of reporting</p> <p>To compare online bullying to other types of bullying</p> <p>To identify similarities and differences between strategies for online bullying and other types of bullying</p> <p>To recognise secure and insecure websites</p> <p>To understand safe and unsafe information to share with other online</p> <p>To evaluate media aimed at boys and girls</p>	<p>To use technology safely, responsibly and respectfully with confidence</p> <p>To accurately recognise, describe in detail and effectively explain acceptable and unacceptable behaviour online effectively</p> <p>To understand how and why to report content and concerns by explaining the most appropriate method of reporting and reason their actions</p> <p>To critically compare online bullying to other types of bullying focusing on similarities and differences</p> <p>To identify similarities and differences between strategies for online bullying and other types of bullying and which strategies are effective for different situations</p> <p>To accurately recognise secure and insecure websites and explain how secure they are</p> <p>To understand safe and unsafe information to share with other online by critically evaluating the information</p> <p>To critically evaluate media aimed at boys and girls and why they may be similar or different</p>

AUTUMN UNIT	Key generic learning objectives	Unit specific learning objectives	Upper KS2 working at the EXPECTED STANDARD	Lower KS2 working ABOVE the expected standard
Children in WWII in Sunderland	Understanding and Creating Algorithms	<ul style="list-style-type: none"> To decompose an open-ended problem into smaller parts and recognise patterns between programs to solve a problem To design, write and debug programs that achieve a specific goal 	<p>To decompose an open-ended problem into smaller parts and recognise patterns between programs to solve a problem</p> <p>To design, write and debug programs that achieve a specific goal</p> <p>To evaluate the effectiveness and efficiency of my algorithm as a whole by continually testing the program</p> <p>To use logical reasoning to detect correct errors in algorithms and programs</p> <p>To recognise the use of a variable to achieve a specific outcome</p> <p>To use a variable and operators to stop a program</p>	<p>To effectively decompose an open-ended problem into smaller parts and consistently recognise patterns between programs to solve a problem</p> <p>To confidently and consistently design, write and debug programs that achieve a specific goal</p> <p>To critically evaluate the effectiveness and efficiency of my algorithm as a whole by continually testing the program</p> <p>To effectively use logical reasoning to confidently detect correct errors in algorithms and programs</p> <p>To confidently recognise the use of a variable to achieve a specific outcome</p> <p>To effectively use a variable and operators to stop a program</p>
	Digital Content and the Internet	<ul style="list-style-type: none"> To effectively create digital content by adding appropriate text, images, sound and videos to meet a specific purpose To effectively plan the process of using, finding, creating and modifying digital content To use logically reasoning to choose an appropriate template to modify to effectively meet a purpose To be digitally critical when evaluating effectiveness of content To be digitally critical when searching for information online by checking its reliability and plausibility To effectively select, use and combine appropriate digital tools to create effects to enhance my work creatively To use a keyboard with increasing fluency and pace To be digitally critically when choosing appropriate tools to edit the appearance of text and images to meet a specific purpose To save, store and retrieve work on an appropriate online platform or school network 	<p>To effectively create digital content by adding appropriate text, images, sound and videos to meet a specific purpose</p> <p>To effectively plan the process of using, finding, creating and modifying digital content</p> <p>To use logically reasoning to choose an appropriate template to modify to effectively meet a purpose</p> <p>To be digitally critical when evaluating effectiveness of content</p> <p>To be digitally critical when searching for information online by checking its reliability and plausibility</p> <p>To effectively select, use and combine appropriate digital tools to create effects to enhance my work creatively</p> <p>To use a keyboard with increasing fluency and pace</p> <p>To be digitally critically when choosing appropriate tools to edit the appearance of text and images to meet a specific purpose</p>	<p>To effectively create digital content by adding appropriate text, images, sound and videos to meet a specific purpose consistently and with confidence</p> <p>To effectively and critically plan the process of using, finding, creating and modifying digital content</p> <p>To confidently use logically reasoning to choose an appropriate template to modify to effectively meet a purpose and articulate their how it meets the purpose</p> <p>To be digitally critical when evaluating effectiveness of content by explain and reasoning their understanding of content</p> <p>To be digitally critical when searching for information online by checking its reliability and plausibility consistently</p> <p>To effectively select, use and combine appropriate digital tools to create effects to enhance my work creatively consistently to meet a purpose</p>

			<p>To save, store and retrieve work on an appropriate online platform or school network</p> <p>To effectively create, critically analyse, confidently evaluate and appropriately present data using spreadsheets, databases and graphs</p> <p>To input a range of formulas to create data (adding, averages)</p> <p>To appropriately edit the format of a cell on a database for different purposes</p> <p>To check the plausibility and accuracy of data collected and how it can be interpreted in different ways</p>	<p>To confidently use a keyboard with increasing fluency and pace</p> <p>To be digitally critically when choosing appropriate tools to edit the appearance of text and images to meet a specific purpose and explain why they have edited in a specific way</p> <p>To confidently and consistently save, store and retrieve work on an appropriate online platform or school network and explain why they have saved their work on the appropriate platform</p> <p>To effectively create, critically analyse, confidently evaluate and appropriately present data using spreadsheets, databases and graphs consistently and explain why they have presented data in specific way</p> <p>To input a range of formulas to create data (adding, averages) with confidence</p> <p>To appropriately edit the format of a cell on a database for different purposes with confidence</p> <p>To critically check the plausibility and accuracy of data collected and how it can be interpreted in different ways</p>
	<p>Understanding the Application of IT</p>	<ul style="list-style-type: none"> To use keywords to make effective internet searches and evaluate rankings of websites and digital content To evaluate the reliability of websites To explain how website are ranked and selected based on how they are searched 	<p>To explain the internet services for different purposes</p> <p>To understand 'copyright' and describe what it means</p> <p>To describe how to acknowledge sources from the internet</p> <p>To describe how information is transported on the internet</p> <p>To understand different types of tools used online and on technologies that can be used for collaboration and communication</p> <p>To use keywords to make effective internet searches and evaluate rankings of websites and digital content</p> <p>To evaluate the reliability of websites</p> <p>To explain how website are ranked and selected based on how they are searched</p>	<p>To effectively explain the internet services for different purposes and why the services are important</p> <p>To confidently understand 'copyright', describe what it means and why it is important</p> <p>To confidently describe how to acknowledge sources from the internet</p> <p>To describe how information is transported on the internet in great detail</p> <p>To understand different types of tools used online and on technologies that can be used for collaboration and communication and compare how we use them</p> <p>To consistently and accurately use keywords to make effective internet searches and critically evaluate rankings of websites and digital content</p> <p>To critically evaluate the reliability of websites</p>

				To confidently explain how website are ranked and selected based on how they are searched by making comparison
	Online Safety and Appropriate Use	<ul style="list-style-type: none"> To use technology safely, responsibly and respectfully To recognise, describe and explain acceptable and unacceptable behaviour online effectively To understand how and why to report content and concerns by explaining the most appropriate method of reporting To compare online bullying to other types of bullying 	<p>To use technology safely, responsibly and respectfully</p> <p>To recognise, describe and explain acceptable and unacceptable behaviour online effectively</p> <p>To understand how and why to report content and concerns by explaining the most appropriate method of reporting</p> <p>To compare online bullying to other types of bullying</p> <p>To identify similarities and differences between strategies for online bullying and other types of bullying</p> <p>To recognise secure and insecure websites</p> <p>To understand safe and unsafe information to share with other online</p> <p>To evaluate media aimed at boys and girls</p>	<p>To use technology safely, responsibly and respectfully with confidence</p> <p>To accurately recognise, describe in detail and effectively explain acceptable and unacceptable behaviour online effectively</p> <p>To understand how and why to report content and concerns by explaining the most appropriate method of reporting and reason their actions</p> <p>To critically compare online bullying to other types of bullying focusing on similarities and differences</p> <p>To identify similarities and differences between strategies for online bullying and other types of bullying and which strategies are effective for different situations</p> <p>To accurately recognise secure and insecure websites and explain how secure they are</p> <p>To understand safe and unsafe information to share with other online by critically evaluating the information</p> <p>To critically evaluate media aimed at boys and girls and why they may be similar or different</p>

SPRING UNIT	Key generic learning objectives	Unit specific learning objectives	Upper KS2 working at the EXPECTED STANDARD	Lower KS2 working ABOVE the expected standard
Sunderland's Heritage: Coalmining	Understanding and Creating Algorithms	<ul style="list-style-type: none"> To recognise the use of a variable to achieve a specific outcome To use a variable and operators to stop a program 	<p>To decompose an open-ended problem into smaller parts and recognise patterns between programs to solve a problem</p> <p>To design, write and debug programs that achieve a specific goal</p> <p>To evaluate the effectiveness and efficiency of my algorithm as a whole by continually testing the program</p> <p>To use logical reasoning to detect correct errors in algorithms and programs</p>	<p>To effectively decompose an open-ended problem into smaller parts and consistently recognise patterns between programs to solve a problem</p> <p>To confidently and consistently design, write and debug programs that achieve a specific goal</p> <p>To critically evaluate the effectiveness and efficiency of my algorithm as a whole by continually testing the program</p>

			<p>To recognise the use of a variable to achieve a specific outcome</p> <p>To use a variable and operators to stop a program</p>	<p>To effectively use logical reasoning to confidently detect correct errors in algorithms and programs</p> <p>To confidently recognise the use of a variable to achieve a specific outcome</p> <p>To effectively use a variable and operators to stop a program</p>
	<h2>Digital Content and the Internet</h2>	<ul style="list-style-type: none"> To effectively create digital content by adding appropriate text, images, sound and videos to meet a specific purpose To effectively plan the process of using, finding, creating and modifying digital content To use logically reasoning to choose an appropriate template to modify to effectively meet a purpose To be digitally critical when evaluating effectiveness of content To be digitally critical when searching for information online by checking its reliability and plausibility To effectively select, use and combine appropriate digital tools to create effects to enhance my work creatively To use a keyboard with increasing fluency and pace To be digitally critically when choosing appropriate tools to edit the appearance of text and images to meet a specific purpose To save, store and retrieve work on an appropriate online platform or school network 	<p>To effectively create digital content by adding appropriate text, images, sound and videos to meet a specific purpose</p> <p>To effectively plan the process of using, finding, creating and modifying digital content</p> <p>To use logically reasoning to choose an appropriate template to modify to effectively meet a purpose</p> <p>To be digitally critical when evaluating effectiveness of content</p> <p>To be digitally critical when searching for information online by checking its reliability and plausibility</p> <p>To effectively select, use and combine appropriate digital tools to create effects to enhance my work creatively</p> <p>To use a keyboard with increasing fluency and pace</p> <p>To be digitally critically when choosing appropriate tools to edit the appearance of text and images to meet a specific purpose</p> <p>To save, store and retrieve work on an appropriate online platform or school network</p> <p>To effectively create, critically analyse, confidently evaluate and appropriately present data using spreadsheets, databases and graphs</p> <p>To input a range of formulas to create data (adding, averages)</p> <p>To appropriately edit the format of a cell on a database for different purposes</p> <p>To check the plausibility and accuracy of data collected and how it can be interpreted in different ways</p>	<p>To effectively create digital content by adding appropriate text, images, sound and videos to meet a specific purpose consistently and with confidence</p> <p>To effectively and critically plan the process of using, finding, creating and modifying digital content</p> <p>To confidently use logically reasoning to choose an appropriate template to modify to effectively meet a purpose and articulate their how it meets the purpose</p> <p>To be digitally critical when evaluating effectiveness of content by explain and reasoning their understanding of content</p> <p>To be digitally critical when searching for information online by checking its reliability and plausibility consistently</p> <p>To effectively select, use and combine appropriate digital tools to create effects to enhance my work creatively consistently to meet a purpose</p> <p>To confidently use a keyboard with increasing fluency and pace</p> <p>To be digitally critically when choosing appropriate tools to edit the appearance of text and images to meet a specific purpose and explain why they have edited in a specific way</p> <p>To confidently and consistently save, store and retrieve work on an appropriate online platform or school network and explain why they have saved their work on the appropriate platform</p> <p>To effectively create, critically analyse, confidently evaluate and appropriately present data using spreadsheets, databases and graphs</p>

				<p><u>consistently and explain why they have presented data in specific way</u></p> <p>To input a range of formulas to create data (adding, averages) <u>with confidence</u></p> <p>To appropriately edit the format of a cell on a database for different purposes <u>with confidence</u></p> <p>To <u>critically</u> check the plausibility and accuracy of data collected and how it can be interpreted in different ways</p>
Understanding the Application of IT	<ul style="list-style-type: none"> To explain the internet services for different purposes To describe how information is transported on the internet To use keywords to make effective internet searches and evaluate rankings of websites and digital content To evaluate the reliability of websites 	<p>To explain the internet services for different purposes</p> <p>To understand 'copyright' and describe what it means</p> <p>To describe how to acknowledge sources from the internet</p> <p>To describe how information is transported on the internet</p> <p>To understand different types of tools used online and on technologies that can be used for collaboration and communication</p> <p>To use keywords to make effective internet searches and evaluate rankings of websites and digital content</p> <p>To evaluate the reliability of websites</p> <p>To explain how website are ranked and selected based on how they are searched</p>	<p>To <u>effectively</u> explain the internet services for different purposes <u>and why the services are important</u></p> <p>To <u>confidently</u> understand 'copyright', describe what it means <u>and why it is important</u></p> <p>To <u>confidently</u> describe how to acknowledge sources from the internet</p> <p>To describe how information is transported on the internet <u>in great detail</u></p> <p>To understand different types of tools used online and on technologies that can be used for collaboration and communication <u>and compare how we use them</u></p> <p>To <u>consistently and accurately</u> use keywords to make effective internet searches and <u>critically</u> evaluate rankings of websites and digital content</p> <p>To <u>critically</u> evaluate the reliability of websites</p> <p>To <u>confidently</u> explain how website are ranked and selected based on how they are searched <u>by making comparison</u></p>	
Online Safety and Appropriate Use	<ul style="list-style-type: none"> To use technology safely, responsibly and respectfully To identify similarities and differences between strategies for online bullying and other types of bullying To understand safe and unsafe information to share with other online 	<p>To use technology safely, responsibly and respectfully</p> <p>To recognise, describe and explain acceptable and unacceptable behaviour online effectively</p> <p>To understand how and why to report content and concerns by explaining the most appropriate method of reporting</p> <p>To compare online bullying to other types of bullying</p> <p>To identify similarities and differences between strategies for online bullying and other types of bullying</p>	<p>To use technology safely, responsibly and respectfully <u>with confidence</u></p> <p>To <u>accurately</u> recognise, describe <u>in detail</u> and <u>effectively</u> explain acceptable and unacceptable behaviour online effectively</p> <p>To understand how and why to report content and concerns by explaining the most appropriate method of reporting <u>and reason their actions</u></p> <p>To <u>critically</u> compare online bullying to other types of bullying <u>focusing on similarities and differences</u></p>	

			<p>To recognise secure and insecure websites</p> <p>To understand safe and unsafe information to share with other online</p> <p>To evaluate media aimed at boys and girls</p>	<p>To identify similarities and differences between strategies for online bullying and other types of bullying <u>and which strategies are effective for different situations</u></p> <p>To <u>accurately</u> recognise secure and insecure websites <u>and explain how secure they are</u></p> <p>To understand safe and unsafe information to share with other online <u>by critically evaluating the information</u></p> <p>To <u>critically</u> evaluate media aimed at boys and girls <u>and why they may be similar or different</u></p>
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SUMMER UNIT	Key generic learning objectives	Unit specific learning objectives	Upper KS2 working at the EXPECTED STANDARD	Lower KS2 working ABOVE the expected standard
<p>What I believe: I have the right to protection from any kind of exploitation.</p> <p>I have the right to give my opinion.</p>	Understanding and Creating Algorithms	<ul style="list-style-type: none"> To evaluate the effectiveness and efficiency of my algorithm whole continually testing the program To use logical reasoning to detect correct errors in algorithms and programs 	<p>To decompose an open-ended problem into smaller parts and recognise patterns between programs to solve a problem</p> <p>To design, write and debug programs that achieve a specific goal</p> <p>To evaluate the effectiveness and efficiency of my algorithm as a whole by continually testing the program</p> <p>To use logical reasoning to detect correct errors in algorithms and programs</p> <p>To recognise the use of a variable to achieve a specific outcome</p> <p>To use a variable and operators to stop a program</p>	<p>To <u>effectively</u> decompose an open-ended problem into smaller parts and <u>consistently</u> recognise patterns between programs to solve a problem</p> <p>To <u>confidently and consistently</u> design, write and debug programs that achieve a specific goal</p> <p>To <u>critically</u> evaluate the effectiveness and efficiency of my algorithm as a whole by continually testing the program</p> <p>To <u>effectively</u> use logical reasoning to <u>confidently</u> detect correct errors in algorithms and programs</p> <p>To <u>confidently</u> recognise the use of a variable to achieve a specific outcome</p> <p>To <u>effectively</u> use a variable and operators to stop a program</p>
	Digital Content and the Internet	<ul style="list-style-type: none"> To be digitally critical when searching for information online by checking its reliability and plausibility To effectively select, use and combine appropriate digital tools to create effects to enhance my work creatively To use a keyboard with increasing fluency and pace 	<p>To effectively create digital content by adding appropriate text, images, sound and videos to meet a specific purpose</p> <p>To effectively plan the process of using, finding, creating and modifying digital content</p>	<p>To effectively create digital content by adding appropriate text, images, sound and videos to meet a specific purpose <u>consistently and with confidence</u></p> <p>To effectively <u>and critically</u> plan the process of using, finding, creating and modifying digital content</p>

		<ul style="list-style-type: none"> To be digitally critically when choosing appropriate tools to edit the appearance of text and images to meet a specific purpose To save, store and retrieve work on an appropriate online platform or school network To effectively create, critically analyse, confidently evaluate and appropriately present data using spreadsheets, databases and graphs To input a range of formulas to create data (adding, averages) To appropriately edit the format of a cell on a database for different purposes To check the plausibility and accuracy of data collected and how it can be interpreted in different ways 	<p>To use logically reasoning to choose an appropriate template to modify to effectively meet a purpose</p> <p>To be digitally critical when evaluating effectiveness of content</p> <p>To be digitally critical when searching for information online by checking its reliability and plausibility</p> <p>To effectively select, use and combine appropriate digital tools to create effects to enhance my work creatively</p> <p>To use a keyboard with increasing fluency and pace</p> <p>To be digitally critically when choosing appropriate tools to edit the appearance of text and images to meet a specific purpose</p> <p>To save, store and retrieve work on an appropriate online platform or school network</p> <p>To effectively create, critically analyse, confidently evaluate and appropriately present data using spreadsheets, databases and graphs</p> <p>To input a range of formulas to create data (adding, averages)</p> <p>To appropriately edit the format of a cell on a database for different purposes</p> <p>To check the plausibility and accuracy of data collected and how it can be interpreted in different ways</p>	<p>To confidently use logically reasoning to choose an appropriate template to modify to effectively meet a purpose and articulate their how it meets the purpose</p> <p>To be digitally critical when evaluating effectiveness of content by explain and reasoning their understanding of content</p> <p>To be digitally critical when searching for information online by checking its reliability and plausibility consistently</p> <p>To effectively select, use and combine appropriate digital tools to create effects to enhance my work creatively consistently to meet a purpose</p> <p>To confidently use a keyboard with increasing fluency and pace</p> <p>To be digitally critically when choosing appropriate tools to edit the appearance of text and images to meet a specific purpose and explain why they have edited in a specific way</p> <p>To confidently and consistently save, store and retrieve work on an appropriate online platform or school network and explain why they have saved their work on the appropriate platform</p> <p>To effectively create, critically analyse, confidently evaluate and appropriately present data using spreadsheets, databases and graphs consistently and explain why they have presented data in specific way</p> <p>To input a range of formulas to create data (adding, averages) with confidence</p> <p>To appropriately edit the format of a cell on a database for different purposes with confidence</p> <p>To critically check the plausibility and accuracy of data collected and how it can be interpreted in different ways</p>
	<p>Understanding the Application of IT</p>	<ul style="list-style-type: none"> To understand 'copyright' and describe what it means To describe how to acknowledge sources from the internet 	<p>To explain the internet services for different purposes</p> <p>To understand 'copyright' and describe what it means</p> <p>To describe how to acknowledge sources from the internet</p>	<p>To effectively explain the internet services for different purposes and why the services are important</p> <p>To confidently understand 'copyright', describe what it means and why it is important</p>

		<ul style="list-style-type: none"> To understand different types of tools used online and on technologies that can be used for collaboration and communication To use keywords to make effective internet searches and evaluate rankings of websites and digital content To evaluate the reliability of websites 	<p>To describe how information is transported on the internet</p> <p>To understand different types of tools used online and on technologies that can be used for collaboration and communication</p> <p>To use keywords to make effective internet searches and evaluate rankings of websites and digital content</p> <p>To evaluate the reliability of websites</p> <p>To explain how website are ranked and selected based on how they are searched</p>	<p>To confidently describe how to acknowledge sources from the internet</p> <p>To describe how information is transported on the internet in great detail</p> <p>To understand different types of tools used online and on technologies that can be used for collaboration and communication and compare how we use them</p> <p>To consistently and accurately use keywords to make effective internet searches and critically evaluate rankings of websites and digital content</p> <p>To critically evaluate the reliability of websites</p> <p>To confidently explain how website are ranked and selected based on how they are searched by making comparison</p>
	<p>Online Safety and Appropriate Use</p>	<ul style="list-style-type: none"> To use technology safely, responsibly and respectfully To recognise secure and insecure websites To evaluate media aimed at boys and girls 	<p>To use technology safely, responsibly and respectfully</p> <p>To recognise, describe and explain acceptable and unacceptable behaviour online effectively</p> <p>To understand how and why to report content and concerns by explaining the most appropriate method of reporting</p> <p>To compare online bullying to other types of bullying</p> <p>To identify similarities and differences between strategies for online bullying and other types of bullying</p> <p>To recognise secure and insecure websites</p> <p>To understand safe and unsafe information to share with other online</p> <p>To evaluate media aimed at boys and girls</p>	<p>To use technology safely, responsibly and respectfully with confidence</p> <p>To accurately recognise, describe in detail and effectively explain acceptable and unacceptable behaviour online effectively</p> <p>To understand how and why to report content and concerns by explaining the most appropriate method of reporting and reason their actions</p> <p>To critically compare online bullying to other types of bullying focusing on similarities and differences</p> <p>To identify similarities and differences between strategies for online bullying and other types of bullying and which strategies are effective for different situations</p> <p>To accurately recognise secure and insecure websites and explain how secure they are</p> <p>To understand safe and unsafe information to share with other online by critically evaluating the information</p> <p>To critically evaluate media aimed at boys and girls and why they may be similar or different</p>