

The British Section: Key Stage 2 Computing Curriculum Overview



	Digital Literacy	Digital media	Programming	Communication and Collaboration	E-Safety
Year 3	<ul style="list-style-type: none"> Select appropriate software for the task/audience Plan structure and layout of a presentation Evaluate and select suitable information and media from a range of electronic resources Organise, refine and present information for a specific audience Understand a keyboard and key shortcuts. <p>When word processing children should:</p> <ul style="list-style-type: none"> be able to use various display features to communicate to an audience: e.g. fact/definition boxes, annotated illustration, leaflet layout. delete/insert and replace text to improve clarity and mood. make corrections using a range of tools (eg spell check, find and replace) develop confidence using both hands when typing <p>RISING STARS Unit 3.4 We are network engineers</p> <ul style="list-style-type: none"> Understand computer networks, including the internet; how they can provide multiple services. <p>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>	<p>RISING STARS Unit 3.3 We are presenters</p> <ul style="list-style-type: none"> Select, use and combine a variety of software 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. Work with various forms of input and output. <p>Use technology safely, respectfully and responsibly.</p>	<p>RISING STARS Programming Unit 3.1: Introduction to Scratch (We are programmers)</p> <ul style="list-style-type: none"> Write and debug programs that accomplish specific goals. Solve problems by decomposing them into smaller parts. Use sequences in programs Use logical reasoning to detect and correct errors in algorithms and programs. <p>RISING STARS Unit 3.2 We are bug fixers</p> <ul style="list-style-type: none"> Debug programs that accomplish specific goals. Use sequence, selection and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to detect and correct errors in algorithms and programs <p>ADDITIONAL Scratch Units</p> <p>Code-IT First Steps in Programming in Scratch</p> <ul style="list-style-type: none"> Decompose a game and program using keyboard inputs. Create sequences including sound. Use repeat loops. Create algorithms and translate into code. Debug programs. <p>LEGO WeDo Unit: Goal Kicker</p> <p>3.1 – Review how to create and execute simple programs Design a program with a specific goal 3.2 – Explore how to use sequence, selection and repetition in a program 3.3 – Design and debug a program with a specific goal Solve a problem by breaking it down into smaller parts</p>	<p>RISING STARS Unit 3.5 We are communicators</p> <ul style="list-style-type: none"> Understand computer networks, including the internet; how they can provide multiple services, such as the WWW; and the opportunities they offer for communication and collaboration. Select, use and combine a variety of software 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. <p>RISING STARS Unit 3.6 We are opinion pollsters</p> <ul style="list-style-type: none"> Select, use and combine a variety of software 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. Understand computer networks, including the internet; how they can provide multiple services, such as the WWW; and the opportunities they offer for communication and collaboration. <p>Discussion (School Spider Website)</p> <ul style="list-style-type: none"> To review different electronic communication technologies used at home and at school. To understand that digital communication systems require a network connecting devices in order to send and receive various forms of data (voice, image, word etc.) Investigate at a simple level the technology used to send or receive a digital communication (SeeSaw, Email, FB) To use an online environment to collaborate with others, including: contributing to a school discussion, writing a school discussion point, posting comments on others' posts, add appropriate images, links (videos). Use GoogleClassroom and collaborate online on a piece of work using Google Docs. Message friends using Google Hangouts 	<p>E-Safety Online Research</p> <ul style="list-style-type: none"> Children recognise that different viewpoints can be found on the web. They critically evaluate the information they use, and understand some of the potential dangers of not doing so. Children are aware of the issues of plagiarism, copyright and data protection in relation to their work. Children select copyright free images and sounds <p>E-Safety Communication & Collaboration</p> <ul style="list-style-type: none"> Decide which online communication tool is the most appropriate to use for a particular purpose Discuss issues to do with emailing. Ensure children are aware of some of the risks, including malware attachments, hacked accounts, spoof links and spam. <p>E-Safety E-Awareness</p> <ul style="list-style-type: none"> Be aware of the issues of privacy on the internet. Consider their digital footprint. Know that malicious adults use the Internet and attempt to make contact with children and know how to report abuse. Show children the link on the school website.

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Year 4	<ul style="list-style-type: none"> Select appropriate software for the task/audience Plan structure and layout of presentation evaluate and select suitable information and media from a range of electronic resources organise, refine and present information for a specific audience Through peer assessment and self-evaluation, make suitable improvements Choose appropriate techniques to create an effective and well-polished presentation considering intended audience. Discuss and evaluate the presentations and give reasons for the chosen styles and techniques <p>When word processing children should:</p> <ul style="list-style-type: none"> be able to use various display features to communicate to an audience: e.g. fact/definition boxes, annotated illustration, leaflet layout. delete/insert and replace text to improve clarity and mood. make corrections using a range of tools (eg spell check, find and replace) develop confidence using both hands when typing understand some Office shortcuts. <p>RISING STARS Unit 4.6 We are meteorologists</p> <ul style="list-style-type: none"> Work with variables and various forms of input and output. Use logical reasoning to explain how simple algorithms work Use search technologies effectively Select, use and combine a variety of software on a range of digital devices. 	<p>Digital Video</p> <ul style="list-style-type: none"> explore all the features of a given video editing or animation package plan a storyboard for a video or animation to suit a purpose film, create, edit and refine to ensure quality; present to an audience <p>RISING STARS Unit 4.3 Digital Music</p> <p>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</p> <p>Understand computer networks including the internet and they opportunities they offer for communication and collaboration.</p> <p>Be discerning in evaluating digital content.</p> <p>Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.</p> <p>Use technology safely, responsibly and respectfully; recognise acceptable and unacceptable behaviour.</p>	<p>RISING STARS Programming Unit 1: We are software developers</p> <ul style="list-style-type: none"> Design, write and debug programs that accomplish specific goals. 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. <p>RISING STARS Programming: Unit 2 We are toy designers.</p> <ul style="list-style-type: none"> Design, write and debug programs that accomplish specific goals. 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. <p>RISING STARS Unit 4.4: We are HTML editors</p> <ul style="list-style-type: none"> 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 technology safely, respectfully and responsibly; know a range of ways to report concerns and unacceptable behaviour. Use and combine a variety of software (including internet services) to accomplish given goals, including presenting information. 	<p>Wikis/Seesaw</p> <p>RISING STARS Unit 4.5 We are co-authors.</p> <p>Solve problems by decomposing them into smaller parts.</p> <p>Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration.</p> <p>Use search technologies effectively.</p> <p>Use a variety of software (including internet services) to create content including presenting information.</p> <p>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns.</p>	<p>E-Safety Online Research</p> <ul style="list-style-type: none"> Children need to consider copyright when sourcing images or media. Children recognise that different viewpoints can be found on the web. They critically evaluate the information they use, and understand some of the potential dangers of not doing so. Children are aware of the issues of plagiarism, copyright and data protection in relation to their work. <p>E-Safety Communication & Collaboration</p> <ul style="list-style-type: none"> Decide which online communication tool is the most appropriate to use for a particular purpose Discuss issues to do with Social Networking. E.g. giving too much information, people using information online, not knowing who is at the other end of the conversation <p>E-Safety E-Awareness</p> <ul style="list-style-type: none"> Be aware of the issues surrounding cyberbullying and understanding the impact on an individual of sending or uploading unkind or inappropriate content. Know that malicious adults use the Internet and attempt to make contact with children and know how to report abuse.

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Year 5	<ul style="list-style-type: none"> Select appropriate software for the task/audience Plan structure and layout of presentation evaluate and select suitable information and media from a range of electronic resources organise, refine and present information for a specific audience Create a range of hyperlinks to produce a non-linear presentation Through peer assessment and self-evaluation, make suitable improvements choose appropriate techniques to create an effective and well- polished presentation considering intended audience. Discuss and evaluate the presentations and give reasons for the chosen styles and techniques <p>When word processing children should:</p> <ul style="list-style-type: none"> be able to use various display features to communicate to an audience: e.g. fact/definition boxes, annotated illustration, leaflet layout. delete/insert and replace text to improve clarity and mood. make corrections using a range of tools (eg spell check, find and replace) develop confidence using both hands when typing 	<p>Digital Imagery</p> <ul style="list-style-type: none"> explore all the features of a given video editing or animation package plan a storyboard for a video or animation to suit a purpose film, create, edit and refine to ensure quality; present to an audience <p>RISING STARS Unit 3: We are artists.</p> <ul style="list-style-type: none"> Develop an appreciation of the links between geometry and art. Become familiar with tools and techniques of a vector graphics package. Develop an understanding of turtle graphics. Experiment with the tools available, refining and developing their work as they apply their own criteria to evaluate and receive feedback from their peers. Develop some awareness of computer-generated art, in particular fractal –based landscapes. <p>RISING STARS Unit 5.6 We are architects</p> <ul style="list-style-type: none"> Use search technologies effectively, appreciate how results are selected and ranked. Select, use and combine a variety of software on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals. 	<p>RISING STARS</p> <p>RISING STARS Unit 2: We are cryptographers – cracking codes.</p> <ul style="list-style-type: none"> Be familiar with semaphore and Morse code. Understand the need for private information to be encrypted. Encrypt and decrypt messages in simple ciphers <p>ADDITIONAL UNIT Programmable LEGO Use Lego to program a machine to pull an object. Links with Forces Science topic. https://education.lego.com/en-gb/lessons/wedo-2-science/pulling</p>	<p>Blogging (kidblog.org)</p> <ul style="list-style-type: none"> Register for a blog: selecting an url and navigate to their blog once it is created. Alter the theme and appearance of their blog, adding background images etc. Create a new post, save it as a draft and publish it. Embed photos, hyperlinks and videos into posts. Reorganise posts and remove posts they no longer want. Like/follow other blogs and build up their blog content over the year. 	<p>E-Safety Online Research</p> <ul style="list-style-type: none"> Children use a range of sources to check the validity of a website. Children recognise that different viewpoints can be found on the web. They critically evaluate the information they use, and understand some of the potential dangers of not doing so. Children are aware of the issues of plagiarism, copyright and data protection in relation to their work. Children select copyright free images and sounds from sources such as the Audio Networks and NEN image gallery. <p>E-Safety Communication & Collaboration RISING STARS Unit 5: Web Developers</p> <ul style="list-style-type: none"> Decide which online communication tool is the most appropriate to use for a particular purpose, e.g. email, discussion forums, podcast, or multi-user documents on Fronter. Discuss issues to do with Social Networking. E.g. giving too much information, people using information online, not knowing who is at the other end of the conversation <p>E-Safety E-Awareness</p> <ul style="list-style-type: none"> Appreciate the need to use complex passwords and to keep them secure. Have some knowledge of how encryption works on the web. Be aware of the issues surrounding cyberbullying and understanding the impact on an individual of sending or uploading unkind or inappropriate content. Know that malicious adults use the Internet and attempt to make contact with children and know how to report abuse.

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Year 6	<ul style="list-style-type: none"> Select appropriate software for the task/audience Plan structure and layout of presentation evaluate and select suitable information and media from a range of electronic resources organise, refine and present information for a specific audience Create a range of hyperlinks to produce a non-linear presentation Through peer assessment and self-evaluation, make suitable improvements choose appropriate techniques to create an effective and well- polished presentation considering intended audience. Discuss and evaluate the presentations and give reasons for the chosen styles and techniques <p>When word processing children should:</p> <ul style="list-style-type: none"> be able to use various display features to communicate to an audience: e.g. fact/definition boxes, annotated illustration, leaflet layout. delete/insert and replace text to improve clarity and mood. make corrections using a range of tools (eg spell check, find and replace) develop confidence using both hands when typing 	<p>Digital Imagery</p> <ul style="list-style-type: none"> explore all the features of a given video editing or animation package plan a storyboard for a video or animation to suit a purpose film, create, edit and refine to ensure quality; present to an audience <p>RISING STARS Unit 3: We are artists.</p> <ul style="list-style-type: none"> Develop an appreciation of the links between geometry and art. Become familiar with tools and techniques of a vector graphics package. Develop an understanding of turtle graphics. Experiment with the tools available, refining and developing their work as they apply their own criteria to evaluate and receive feedback from their peers. Develop some awareness of computer-generated art, in particular fractal –based landscapes. <p>RISING STARS Unit 5.6 We are architects</p> <ul style="list-style-type: none"> Use search technologies effectively, appreciate how results are selected and ranked. Select, use and combine a variety of software on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals. 	<p>RISING STARS RISING STARS Unit 2: We are cryptographers – cracking codes.</p> <ul style="list-style-type: none"> Be familiar with semaphore and Morse code. Understand the need for private information to be encrypted. Encrypt and decrypt messages in simple ciphers <p>ADDITIONAL UNIT Programmable LEGO Use Lego to program a machine to pull an object. Links with Forces Science topic. https://education.lego.com/en-gb/lessons/wedo-2-science/pulling</p>	<p>Blogging (kidblog.org)</p> <ul style="list-style-type: none"> Register for a blog: selecting an url and navigate to their blog once it is created. Alter the theme and appearance of their blog, adding background images etc. Create a new post, save it as a draft and publish it. Embed photos, hyperlinks and videos into posts. Reorganise posts and remove posts they no longer want. Like/follow other blogs and build up their blog content over the year. 	<p>E-Safety Online Research</p> <ul style="list-style-type: none"> Children use a range of sources to check the validity of a website. Children recognise that different viewpoints can be found on the web. They critically evaluate the information they use, and understand some of the potential dangers of not doing so. Children are aware of the issues of plagiarism, copyright and data protection in relation to their work. Children select copyright free images and sounds from sources such as the Audio Networks and NEN image gallery. <p>E-Safety Communication & Collaboration RISING STARS Unit 5: Web Developers</p> <ul style="list-style-type: none"> Decide which online communication tool is the most appropriate to use for a particular purpose, e.g. email, discussion forums, podcast, or multi-user documents on Fronter. Discuss issues to do with Social Networking. E.g. giving too much information, people using information online, not knowing who is at the other end of the conversation <p>E-Safety E-Awareness</p> <ul style="list-style-type: none"> Appreciate the need to use complex passwords and to keep them secure. Have some knowledge of how encryption works on the web. Be aware of the issues surrounding cyberbullying and understanding the impact on an individual of sending or uploading unkind or inappropriate content. Know that malicious adults use the Internet and attempt to make contact with children and know how to report abuse.