

Term: Spring Term	Subject: Computing	
NC Objectives	Key knowledge	Vocabulary
<p><u>Year 1</u></p> <p><u>Multimedia</u></p> <ul style="list-style-type: none"> • use technology purposefully to create, organise, store, manipulate and retrieve digital content • recognise common uses of information technology beyond school. <p><u>E-safety</u></p> <p>use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</p> <p><u>Technology in Our Lives</u></p> <ul style="list-style-type: none"> • 	<p><u>Multimedia 1 – Describe My toys</u></p> <p>To know how to use technology to create and present my ideas.</p> <p>To know how to be creative with different technology tools.</p> <p>To know that we can use computers to present information.</p> <p>To know that information can be stored on a computer and can be retrieved.</p> <p>To know that technology can be used to create our own story.</p> <p>To understand key vocabulary: keys/ keyboard/ mouse pad/ screen/r, I click, program.</p> <p>To know that we can use technology to present my ideas.</p> <p>To know that we can use the colour green to hide our real environment and replace it with a new background (picture.)</p> <p>To choose a new background linked their presentation.</p> <p>To know that their work can be stored, viewed and changed on their device.</p> <p><u>E-safety</u></p> <p><u>Spring 1</u></p> <p>Know different technologies.</p> <p>Know how to communicate responsibly with others.</p> <p>Know that something I put online can be seen by others.</p> <p>Know to be careful about the icons I click or tap on.</p> <p><u>Spring 2</u></p> <p>Know what my personal information is and keep it private.</p>	<p><u>Multimedia</u></p> <p>computers, information, stored, technology, keys, keyboard, mouse pad, screen, click, program, technology, environment, presentation, stored, viewed, device</p> <p><u>E-safety</u></p> <p>Personal information, private, communicate, online, icons, information, technology rules.</p>

	<p><u>TIOL - Discovering Our Technology</u></p> <p>I know what technology is. I know how to find it around the school and at home. I understand that there are different types of technology. I understand what technology can be used for.</p>	
<p><u>Year 2</u></p> <p><u>Programming</u></p> <ul style="list-style-type: none"> • understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. • create and debug simple programs. • use logical reasoning to predict the behaviour of simple programs. <p><u>Multimedia</u></p> <ul style="list-style-type: none"> • use technology purposefully to create, organise, store, manipulate and retrieve digital content • recognise common uses of information technology beyond school. <p><u>E-safety</u></p> <ul style="list-style-type: none"> • use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. 	<p><u>Programming – Make My Shapes with Bee Bot</u></p> <p>Know the order in which to do things and that this is called an algorithm Know how to look at a friend’s program and tell you what will happen Understand how to execute a program and spot where it goes wrong so that I can debug it. Understand how to program a BeeBot to do a task</p> <p><u>Multimedia – Present my information</u></p> <p>Know how to use technology to organise and present my ideas. Know how to add text and images. Know how to use an online tool to share my ideas. Know how to save and open files.</p> <p><u>E-safety</u> <u>Spring 1</u></p>	<p><u>Programming</u> Algorithm, Bee Bot, floor robot, execute, debug, task</p> <p><u>Multimedia</u> searched, lower and upper case, space and full stops, personal information, save, open, device, tool, add, delete, present, software, app.</p> <p><u>E-safety</u> Personal, safe, polite, kind, trusted, passwords, unexpected.</p>

	<p>To know where to go for help and support if something makes them feel uncomfortable. To know the importance of keeping personal information safe. To know that not all information online is true.</p> <p><u>Spring 2</u> Know why it is important to be polite and kind online. Know how to keep myself safe online by talking to a trusted adult.</p>	
<p>Year 3 <u>On line safety</u></p> <ul style="list-style-type: none"> • I can use a secure password • I can protect my personal information • I can participate safely in an on-line community • I can ask a trusted adult before downloading files and games. <p><u>TIOL</u></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 search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content <p><u>Multimedia – Make my e-book</u></p> <ul style="list-style-type: none"> • select, use and combine a variety of software (including internet services) on a range of digital 	<p><u>E-safety</u> <u>Spring A</u> To know that passwords should be kept secure and explain why they are important.</p> <p>To know how to protect my personal information when I do different things online.</p> <p><u>Spring B</u> To know how to participate safely and responsibly in a secure online community</p> <p><u>TIOL 2 – Scan my code</u> Know how to scan a QR code. Know how to create my own QR code.</p> <p><u>TIOL 3 – Send my email</u> Know how to use an email to communicate online To know how to open up an email and reply to it. Know how to send an email.</p>	<p><u>E-safety</u> Passwords, secure, important, private, personal, information, secret, participate, online, community, responsible, responsibly</p> <p><u>TIOL</u> Copyright, edit, filter, search, tools, website, games, refine, hyperlink, QR codes, search engine, image, effects, email, send, reply, communicate.</p> <p><u>Multimedia – Make my e-book</u> Images, text, hyperlink, e-book, create, narration</p>

<p>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><u>Multimedia – Make my e-book</u> To use a selection of e-books. Know how to create own e-book. Know how to add images, text and hyperlinks Know how to add narration.</p>	
<p>Year 4 <u>E-safety</u></p> <ul style="list-style-type: none"> • 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 • Use technology safely, respectfully and responsibly <p><u>Multimedia – My comic book</u></p> <ul style="list-style-type: none"> • Change the appearance of text to increase its effectiveness. • Create, modify and present documents for a particular purpose. • Use an appropriate tool to share my work. • Give constructive feedback. • Explore new media. <p><u>TIOL – Check my facts</u></p> <ul style="list-style-type: none"> • Think about the reliability of information. • Identify where a resource is from. • Identify key words to use when searching. • Check own photos, clipart and text. <p><u>Programming – Lego mindstorms – see DT link</u></p>	<p><u>E-safety</u> Know how to use technology safely, respectfully and responsibly. Understand acceptable/unacceptable behaviour Know how to report concerns about content and contact</p> <p><u>Multimedia</u> Know how to manipulate images and text. Know what an internal hyperlink is and add one to my comic. Know how to change the style, colour and layout. Know how to use software to explain key processes.</p> <p><u>TIOL</u> Know how to identify specific clues that tell me that some information online isn't reliable. Know what plagiarism is and why it is important.</p> <p><u>Programming – Lego mindstorms – see DT link</u> Understand and use electrical systems in their products, (for example incorporating switches, buzzers, bulbs and motors) Apply their understanding of Computing to program, monitor and control their products.</p>	<p><u>E-safety</u> safely, respectfully, responsibly, acceptable/unacceptable behaviour, report concerns, content, contact</p> <p><u>Multimedia</u> Effect, screen shot, layout, style, purpose, change, hyperlink, document, present, modify, comic, image, text, shape, feedback, appearance, modify, create, tool, media, insert, effectiveness, software.</p> <p><u>TIOL</u> Copyright, plagiarism, app, reliability, resource, query, thinking, persuasive.</p> <p><u>Programming – Lego mindstorms – see DT link</u> Pulleys, gears, motors, ports, wires, command, program algorithm, debug, troubleshoot, substitute</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>Year 5</p> <p><u>Programming</u></p> <ul style="list-style-type: none"> Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information <p><u>Handling Data – changing materials</u></p> <ul style="list-style-type: none"> Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information <p><u>E-safety</u></p> <ul style="list-style-type: none"> Use technology safely, respectfully and responsibly Recognise acceptable/unacceptable behaviour 	<p><u>Programming – Sparling with my crumble</u></p> <p>Know how to use a variable to increase programming possibilities.</p> <p>Know how to use ‘if’ and ‘then’ commands to select an action.</p> <p>Know how to decompose a problem.</p> <p>Know how to design an algorithm.</p> <p>Know how to use logical reasoning to detect and debug mistakes in a program.</p> <p>Know how to change an input to a program to achieve a different output.</p> <p><u>Data handling – changing materials</u></p> <p>Know how to use a datalogger to collect and record data.</p> <p>Know which tool is appropriate.</p> <p>Know how to present data in an appropriate way.</p> <p>Know how to identify mistakes in data and suggest how it could be checked.</p> <p><u>E-safety</u></p> <p><u>Spring A:</u></p> <p>Know the risks of sharing too much about myself online</p> <p><u>Spring B:</u></p>	<p><u>Programming</u></p> <p>Variable, command, problem, algorithm, debug, output, input, data, spreadsheet, Excel, graph, information</p> <p><u>Handling Data – changing materials</u></p> <p>Implement, collaboration, input, recording, data logging, graph, results, theme, filter, average, plausible, average, anomaly</p> <p><u>E-safety</u></p> <p>Risk, sharing, compare, face-to-face</p>

	<p>Know how to compare my online and face-to-face relationships</p>	
<p>Year 6</p> <p><u>E-safety</u> Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p><u>Multimedia</u></p> <ul style="list-style-type: none"> • Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information • 	<p><u>E-safety</u></p> <p><u>Spring A</u> Know what is safe and unsafe information on a social media profile. Know that they need to be protective of their personal information online. Know the consequences of sharing too much information online.</p> <p><u>Spring B</u> Know the difference between online and offline friends. Know why people online may not be who they say they are. Know questions which they should not answer directly online. Know how to give a responsible answer to questions asked online. Know to block and report people if they receive questions or comments which make them uncomfortable.</p> <p><u>Multimedia 1 and 3</u> Know how to talk about audience, atmosphere and structure when planning a particular outcome.</p>	<p><u>E-safety</u> Social media profile, protective, block and report.</p> <p><u>Multimedia</u> Audience, atmosphere, structure, outcome, unfamiliar, technology, purpose, digitally discerning , evaluating, consistent, layout, animation,</p>

	<p>Know how to identify the potential of unfamiliar technology to increase my creativity.</p> <p>Know how to combine a range of media.</p> <p>Know how to select a particular tool for a specific purpose.</p> <p>Know how to be digitally discerning when evaluating the effectiveness of my own work.</p>	
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