

Term: Summer Term	Subject: Computing	
NC Objectives	Key knowledge	Vocabulary
<p>EYFS</p> <ul style="list-style-type: none"> to find out about and use a range of everyday technology. to choose from the technological opportunities around them to enhance and extend their learning. 	<p>To know how best to make a record of a special event in their lives, such as a journey on a steam train.</p> <p>To know about technology and its use in his or her life and local environment.</p>	<p>computers, ipad, tablet, interactive whiteboard, laptop, e-safety, digital camera</p>
<p>Year 1</p> <p><u>Handling Data</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>Handling Data – Present my weather data</u></p> <p>Know how to be creative with different technology tools. Know how to save information in a special place and retrieve it.</p> <p>Know what data is.</p> <p>Know we can collect data about various things.</p> <p>Know a computer can be used to sort information/ data.</p> <p>Know how to collect data about weather OR length of shadows</p> <p>To understand how we can record data measurements from equipment</p> <p>Know what a pictograph is.</p> <p>To present data in a pictograph.</p> <p>Know what software is and how it can be used to create a pictograph.</p> <p>To understand how to use appropriate software to create a pictograph</p> <p>Know how to create, save and retrieve an annotated image</p>	<p><u>Handling Data</u></p> <p>Data, weather, information, count, shadows, measure, store, pictograph, present, software, save, retrieve, image</p> <p>Data, weather, information, count, shadows, measure, store, pictograph, present, software, save, retrieve, image</p> <p><u>E-safety</u></p> <p>Website, app, game, select, link, information, icon, click, tap, purpose, age rating</p>

	<p><u>E-safety</u></p> <p><u>Summer 1</u></p> <p>Know how to select from a list of apps, games and websites. Know how to use links to websites to find information. Know how to be careful with the icons I tap on.</p> <p><u>Summer 2</u></p> <p>Know how to use devices for an allocated amount of time.</p>	
<p>Year 2</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>Handling Data</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><u>Programming – Scratch Junior</u></p> <ul style="list-style-type: none"> • Understand how to give instructions to my friend and physically follow their instructions. • Know how to look at a friend’s program and tell you what will happen. • Know how to use Scratch Jnr to make sprites move. • Understand how to execute a program and spot where it goes wrong so that I can debug it. • Know the order in which to do things and know that this is called an algorithm • Understand how to program a sprite to do a task <p><u>Handling Data 1</u></p> <p><u>Sorting my birds</u></p> <p>Know how to make and save a chart or graph using the data I collect.</p>	<p>Programming</p> <p>Sprite, programming software, execute, algorithm, debug.</p> <p><u>Handling Data</u></p> <p>branching database, decision tree, block graph, habitats photos, block graph findings, graph, data, investigate</p> <p><u>E-safety</u></p> <p>Age appropriate, websites, apps, guided, review, healthy, technology, choice.</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>Know how to talk about the data. Know how begin to investigate the kind of information I could use to help me answer a question.</p> <p><u>Handling Data 2</u> <u>Sorting my Animals</u></p> <p>To know how to use online branching database to identify animals To understand how to make a decision tree To know how to create a block graph of animals in different habitats To know how to use photos and block graphs to show findings of investigation</p> <p><u>E-safety</u> <u>Summer 1</u> To know how to describe the things I enjoy about age appropriate apps, games and websites.</p> <p><u>Summer 2</u> To know when I have been using a device for too long and to take a break. To know that there are a range of other things I could be doing when I am not using my device.</p>	
<p>Year 3</p> <p><u>Handling Data – My top trump database</u></p>	<p><u>Handling Data – My top trump database</u> To know what data is.</p>	<p><u>Handling Data</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 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. <p><u>E-safety</u></p> <ul style="list-style-type: none"> use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour identify a range of ways to report concerns about content and contact. <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</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, 	<p>To know that collecting data will help answer a question.</p> <p>To know that data can be organised in different ways</p> <p>To know how to search a ready-made database to answer questions.</p> <p>To know how to add information to a database.</p> <p>To know what a data logger is.</p> <p>To know how to use a data logger to monitor changes and can talk about the information collected.</p> <p>To understand how to collect data to help answer a question</p> <p>To present data using appropriate software</p> <p>To know how to create different effects with different technology tools</p> <p><u>E-safety</u> <u>Summer A</u></p>	<p>Data, collecting, organised, search, ready-made, database, information, data logger, monitor, record, save, retrieve</p> <p><u>E-safety</u> Identify, images, altered, digitally, fake, adverts, online, Google searches, appropriate, apps, applications, games, websites, agreed, specific, choices, devices</p> <p><u>TIOL</u> Send, receive, e-mail, search engine, forever, electronic, communication, message, text, videochat, style, mail box, username, contact</p> <p><u>Multimedia</u> Implement, copyright, graphics, sounds, commands, evaluate.</p>
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<p>systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p>	<p>To know how to identify images which have been digitally altered. To know how to identify adverts online, including those within Google searches</p> <p><u>Summer B</u> To know about and use age-appropriate apps, games and websites.</p> <p>Know that specific apps, games and websites should be used from an agreed list.</p> <p>Know how to make good choices about when and why I use devices</p> <p><u>TIOL – My safe searching</u> To understand how emails are used to communicate To create and send an email as a class</p> <p>Know of ways to communicate with others online. Know how to protect personal information.</p> <p><u>Multimedia 2 – My Art in different styles</u> Know how to create different effects with different technology tools. Know how to combine a mixture of text, graphics and sound to share my ideas. Know how to evaluate my work and improve its effectiveness.</p>	
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<p>Year 4</p> <p><u>E-safety – I am healthy</u></p> <ul style="list-style-type: none"> Identify use technology safely, respectfully and responsibly recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact <p><u>Programming</u></p> <ul style="list-style-type: none"> use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs <p><u>Handling Data</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 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. <p><u>Multimedia 2</u></p> <p><u>Advertising My Game</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 – I am healthy</u></p> <p>Know how to report unacceptable behaviour online</p> <p>Understand that a digital footprint lasts forever</p> <p><u>Programming</u></p> <p>Know how to spot an error in a programme</p> <p>Understand how to use repeat functions</p> <p>Know how to build a sequence into a programme</p> <p>Understand that information needs to be checked and verified</p> <p>Understand which websites to trust</p> <p>Know how to use a programme to build a bar graph</p> <p><u>Handling Data</u></p> <p>Know how to collect data to put into a graph</p> <p><u>Multimedia</u></p> <p>Know how to use photos, video and sound to create an atmosphere when presenting to different audiences.</p> <p>Know how to explore new media to extend what I can achieve.</p> <p>Know how to create, modify and present documents for a specific purpose.</p> <p>Know how to give constructive feedback to my friends.</p>	<p><u>E-safety</u></p> <p>Report, unacceptable behaviour, digital footprint.</p> <p><u>Programming</u></p> <p>Error, repeat functions, sequence, checked, verified, trust</p> <p><u>Handling Data</u></p> <p>Bar graph, collect data</p> <p><u>Multimedia</u></p> <p>Presenting, audience, media. Create, modify, purpose, document</p>
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<p>Year 5</p> <p>Multimedia – My Sound, My Mood</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>TIOL – My Web Detective</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 <p>E Safety 2</p> <ul style="list-style-type: none"> use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. 	<p><u>Multimedia</u> Know how to use and combine technology tools to create effects that have an impact on others.</p> <p><u>TIOL</u> Know how to describe different parts of the internet. Know how to use a search engine to find appropriate information and check its reliability. Know how to recognise and evaluate different types of information on the WWW.</p> <p><u>E-Safety</u> Know the reasons why images are altered. Know the intended audience for an advert.</p>	<p><u>Multimedia</u> technology tools, effects, impact <u>TIOL</u> search engine, appropriate, reliability <u>E-Safety</u> altered, intended audience</p>
<p>Year 6</p> <p><u>Mindstorms</u></p> <p><u>Handling Data – Checking my fitness</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 use technology 	<p><u>Handling Data – Checking my fitness</u> Know how to plan the process needed to investigate the world around me. Know how to select the most effective tool to collect data for my investigation. Know how to check data and collect for accuracy and plausibility. Know how to interpret and present data. Know the difference between data and information</p>	<p><u>Multimedia 1</u> promotional, image, editing, green screening, audience, atmosphere, structure</p>

<p>safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p><u>TIOL 1 and TOIL2</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>E-safety</u></p> <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>Know how data can be represented and which one is most appropriate. Know how to interpret data. <u>TIOL 1 and TOIL2</u></p> <p>Know how the internet works. Know how information is transported on the Internet. Be able to explain the terms: client, router, ISP, DNS, web server Know the different parts of a webpage such as: URL, images, banner, menu, text, hyperlinks. Know how search results are selected and ranked. Know how to check the reliability of a website. Know what copyright means and acknowledge the sources of information.</p> <p><u>E-safety</u> <u>Summer A</u></p> <p>Know how images in the media do not reflect reality. Know how images in the media affect how we feel about ourselves. Know what digital advertising is. Know what body image means. Know how body image can be influenced by digital advertising. Know how my data is used to target adverts. <u>Summer B</u></p> <p>Know how to stay in control as a digital citizen. Know the gains and risks of the following terms covered this year: agreement, privacy, age appropriate, reporting, protecting devices.</p>	<p><u>Handling Data</u> data, information, sources of information debug, sequence of code, plausibility, interpret</p> <p><u>TIOL 1 and TOIL2</u> client, router, ISP, DNS, web server, URL, banner, hyperlinks, ranked, reliability, copyright, acknowledge</p> <p><u>E-safety</u> Reality, media, digital advertising, target audience, digital citizen, agreement, privacy, age appropriate, reporting, protecting devices</p>
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