

	<b>Autumn 1 – E-safety</b>	<b>Autumn 2 – Digital Literacy</b>	<b>Spring – Digital Literacy</b>	<b>Summer - Computing</b>
<b>Year 1</b>	<p><u>Learning Objectives:</u></p> <p>Have awareness of the SMART rules To know why to keep passwords safe. To know what personal information is To recognise appropriate websites To know to tell an adult when they see something unexpected or worrying. To understand why it is important to be polite and kind online. Identify ICT equipment in their environment and understand that these all have a set of instructions to work (i.e washing machine, microwave) Begin to identify some of the benefits of using technology.</p>	<p><u>Learning Objectives:</u></p> <p>Take own photos with control over framing and upload these with help Know how to save into a specific folder using save as and retrieve saved work Add detail to photos using a paint package insert photos or pictures into a program Use the computer to present work in a range of forms ie simple graphs and tables, photo flipcharts</p>	<p><u>Learning Objectives:</u></p> <p>Use links to websites to find information. Use ICT to listen to and read online stories type sentences using full stops, space, enter and backspace Use the keyboard or a word bank on my device to enter text. Add detail to photos using a paint package Take own photos with control over framing and upload these with help</p>	<p><u>Learning Objectives:</u></p> <p>Use probots/beebots to get from one place to another. describe what actions I will need to do to make something happen and begin to use the word algorithm. begin to predict what will happen for a short sequence of instructions. begin to use software/apps to create movement and patterns on a screen. use the word debug when I correct mistakes when I program Predict what will happen from a given set of instructions give instructions to my friend (using forward, backward and turn) Using right angles and the language of turn Identify ICT equipment in their environment and understand that these all have a set of instructions to work (i.e washing machine, microwave) begin to identify some of the benefits of using technology.</p>
	<p><u>Theme – Mysteries</u> <u>Suggested Project:</u> See E-safety Unit of Work below.</p>	<p><u>Theme – Childhood Around the World</u>  <u>Suggested Project:</u></p>	<p><u>Theme - Climates Around the World (Freeze Frame)</u>  <u>Suggested Project:</u> Create an information booklet about</p>	<p><u>Theme – Blaze of Glory</u> <u>Suggested Activity:</u> To work in groups and create a drawing of a significant building in the London fire using Probots. This</p>

		To create a collage of pictures of children from around the world. The pictures can be chosen and edited with different effects and printed.	Greenholm School that the children could send to children who live in the artic. This may include a picture on each page with one sentence or one word. Their booklet should then include information about how we live in the UK and what our school is like.	can be completed over a number of weeks to allow the children to add detail to their buildings.
<b>Year 2</b>	<b><u>Learning Objectives:</u></b>	<p>To understand how to keep passwords safe</p> <p>To understand that people have created the information I use</p> <p>To know who can see my work online</p> <p>Know and use the SMART rules</p> <p>To describe the things that happen online that must I must tell an adult about.</p> <p>To know that not everyone is who they say they are online.</p> <p>To save work to a folder</p> <p>To be able to word process</p> <p>To change fonts for purpose</p> <p>To record sounds/videos to use in a project</p> <p>To collect information</p> <p>To space text for others to read</p> <p>To use a keyboard to add text.</p> <p>To navigate to document libraries</p> <p>To create their own folder and rename it</p> <p>To save work.</p> <p>To be able to word process</p> <p>To change fonts for purpose</p> <p>To record sounds/videos to use in a project</p> <p>To collect information</p> <p>To space text for others to read</p> <p>To use a keyboard to add text.</p> <p>To navigate to document libraries</p> <p>To create their own folder and rename it</p>	<b><u>Learning Objectives:</u></b>	<b><u>Learning Objectives:</u></b>
			<p>Find places using google maps and street view</p> <p>Use ICT to listen to and read online stories</p> <p>Add content from multiple programs</p> <p>word process own work using bold, underline and centre etc</p> <p>Change fonts for purpose</p> <p>use the keyboard on my device to add, delete and space text for others to read.</p> <p>Know how to use redo and undo</p> <p>Take own photos upload and manipulate using a simple program</p> <p>To be able to word process</p> <p>To collect information</p> <p>To space text for others to read</p> <p>To use a keyboard to add text.</p> <p>To navigate to document libraries</p> <p>To make and save a chart or graph using the data they collect</p> <p>talk about the data that is shown in my chart or graph</p> <p>use technology to organise and</p>	<p>create a simple program (scratch) including a range of instructions</p> <p>I can program a robot or software to do a particular task. • I can look at my friend’s program and tell you what will happen. • I can use programming software to make objects move. • I can watch a program execute and spot where it goes wrong so that I can debug it. • I can tell you the order I need to do things to make something happen and talk about this as an algorithm.</p> <p>debugging</p> <p>plan and predict what will</p> <p>use online simulations to change variables and see their effect</p> <p>tell you why I use technology in the classroom</p> <p>tell you why I use technology in my home and community</p>

	To save work.		present my ideas in different ways.	can identify benefits of using technology including finding information, creating and communicating
	<u>Theme – Heroes</u> <u>Suggested Projects:</u> See E-safety Unit of Work below.		<u>Theme – Our World</u> <u>Suggested Project:</u>  <b>Half term 1</b> – To create a poster advertising their performance at the hippodrome.  <b>Half term 2</b> – To collect and present data for scientific purposes. The children will need to create graphs and tables using Excel/Word to present the science findings ad data.	<u>Theme – The Seaside</u> <u>Suggested Activity:</u> To create a seaside scene on Scratch. This must include a background, sprites, speech and some form of movement.
<b>Year 3</b>	<u>Learning Objectives:</u>  To know what makes a secure password and why it is important To know how to keep their personal information safe To know how to use safety features of key website.	<u>Learning Objectives:</u>  To use key words to search Refine key words to search more efficiently To be able to print screen a picture To be able to edit a picture Edit digital content using different programs.	<u>Learning Objectives:</u>  Add to a database. Make a branching database. Talk about the different ways data can be organised. Search a readymade database to answer questions Collect data to help me answer a	<u>Learning Objectives:</u>  break an open ended problem up into smaller parts. put programming commands into a sequence to achieve a specific outcome keep testing my program and can recognise when I need to debug it.

	<p>To protect personal information when they are online          To know when they are online on a range of equipment          Recognise websites and games appropriate to my age          To make good choices about the amount of time spent online.</p>	<p>Resize and edit pictures          To create different effects with different technology tools.</p>	<p>question.          Use search tools to find and use an appropriate website.          Use the word kids to search          Refine questions to search more efficiently          Copy text from an internet page to an office document</p> <p>Spring Term 2:          Use Ctrl Alt PrtSc (Print Screen) to take a picture of the whole screen and paste it into paint to adapt it.          Use the snipping tool to take a picture of any part of the screen, drawing or annotating the image and saving it.          resize images without changing the proportions          use shift to access symbols on top of keys          delete using backspace and delete appropriately          highlight text efficiently i.e. click and drag, double click words or end of lines          use appropriate keyboard commands to amend text i.e ctrl x          create different effects with different technology tools.          combine a mixture of text, graphics and sound          Edit digital content using one or more programs, such as word-processors, presentation software, or image-, audio- or video-editing</p>	<p>can use repeat commands.          can describe the algorithm I will need for a simple task.          can detect a problem in an algorithm which could result in unsuccessful programming.          control a physical/virtual system using an algorithm</p>
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			<p>packages.          Understand what e-mail is and how it works          create, send, forward and reply to emails          create an address book          Organise email using folders and deleting          Report spam</p>	
	<p><u>Theme</u> – The Land Before Time  <u>Suggested Project:</u>  <b>Half term 1</b> – To create a collage of appropriate websites, comments and information to show how to stay safe online. This can be a large class collage or a group collage. The collage can spell out a key element of e-safety.</p> <p><b>Half term 2</b> – To create a leaflet/poster using Microsoft Publisher to advertise Birmingham. Their leaflets should include information about the arts (music, poetry, art, museums etc.) and famous landmarks or attractions.</p>	<p><u>Theme</u> – Roads, Rivers and Romans  <u>Suggested Project:</u>  <b>Half Term 1</b> – To explore and study Databases . (see lesson ideas below)</p> <p><b>Half Term 2</b> – To create a wanted poster of Boudicca which needs to be shared via the internet through an emailing project.</p>	<p><u>Theme</u> – Inventions  <u>Suggested Activity:</u>          To create a short and simple story on Scratch using a variety of algorithms. The story needs to be based on whatever they are writing in literacy.</p>	
<b>Year 4</b>	<p><u>Learning Objectives:</u></p> <p>To choose a secure password and appropriate screen name to use online.          Talk about why I need to ask an adult before I download files from the internet.          Comment positively and respectfully online and through text messages.          Talk about ways I can protect myself online</p>	<p><u>Learning Objectives:</u></p> <p>Insert a table adding new columns or rows and merging cells          Insert a table and adjust its formatting          Size, rotate and format a text box          Move a text box around a page          Insert a picture from a file          Organise data in different ways.          Collect data and identify where it could be inaccurate.          Plan, create and search a database to answer questions.</p>	<p><u>Learning Objectives:</u></p> <p>Think about the reliability of information I read on the World Wide Web.          use a keyboard confidently and make use of a spellchecker to write and review my work          understand that programs like PowerPoint are primarily about presenting information in manageable chunks          add slides and change their layout</p>	<p><u>Learning Objectives:</u></p> <p>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          use logical thinking to solve an open-ended problem by breaking it up into smaller parts.</p>

	<p>Use the safety features of websites as well as reporting concerns to an adult.          Help others make good choices about the time they spend online.          Discuss the importance of choosing an age-appropriate website.</p>	<p>Choose the best way to present data</p>	<p>add text and modify using formatting tools          know how to use presentation mode          reorder slides          be able to talk alongside a presentation cycling slides as required          add sound files and video to a slide          animate and add slide transitions          investigate transitions and animations that enhance a viewer's enjoyment and which distract from the information presented          can use photos, video and sound to create an atmosphere when presenting to different audiences          create a hyperlink to a resource on the World Wide Web</p>	<p>use an efficient procedure to simplify a program.          use a sensor to detect a change which can select an action within my program.          know that I need to keep testing my program while I am putting it together.          use a variety of tools to create a program.          recognise an error in a program and debug it.          recognise that an algorithm will help me to sequence more complex programs          recognise that using algorithms will also help solve problems in other learning</p>
	<p><u>Theme – Gadgets and Gizmos</u>  <u>Suggested Projects:</u>  <b>Half term 1</b> – To create a collage of appropriate websites, comments and information to show how to stay safe online. This can be a large class collage or a group collage. The collage can spell out a key element of e-safety.   <b>Half term 2</b> – To create a leaflet/poster using Microsoft Publisher to advertise Birmingham. Their leaflets should include information about the arts (music, poetry, art, museums etc.) and famous landmarks or attractions.</p>		<p><u>Theme – Chocolate</u>   <u>Suggested Project:</u>          To create a PowerPoint presentation based on chocolate, which they will need to present to their peers.</p>	<p><u>Theme – Kings and Queens</u>  <u>Suggested Activity:</u>          The children need to create a scratch program based on the games 'rock band' and 'chat bot'.</p>
<p><b>Year 5</b></p>	<p><u>Learning Objectives:</u></p>	<p><u>Learning Objectives:</u></p>	<p><u>Learning Objectives:</u></p>	<p><u>Learning Objectives:</u></p>

	<p><b>Protecting Devices</b> to explain the need to protect computer or device from harm.</p> <p><b>Online Etiquette</b> know that anything posted online can be seen, used and may affect others. can explain the importance of communicating kindly and respectfully. can tell you about copyright and acknowledge the sources of information that I find online.</p> <p><b>Staying Safe</b> know that websites can use my data to make money and target their advertising can choose a secure password and screen name protect passwords and other personal information. can explain the need to protect self and friends and know the best ways to do this, including reporting concerns to an adult. can talk about the dangers of spending too long online or playing a game.</p>	<p><b>Spread sheets and databases</b> use a spreadsheet and database to collect and record data. choose an appropriate tool to help collect data. present data in an appropriate way. talk about mistakes in data and suggest how it could be checked. to search a database using different operators to refine my search. Understand what a spreadsheet does Identify key elements of a spreadsheet (cells, columns, rows and formula's) Know how to manipulate rows and columns Adapt a previously created graph to add axis and titles Know how to create a graph from prepared spread sheet data</p>	<p><b>Presenting Information</b> select, copy, paste objects and groups of objects layer objects group and ungroup objects use text, photo, sound and video editing tools to refine my work. select, use and combine the appropriate technology tools to create effects that will have an impact on others. review and improve my own work and support others to improve their work. select an appropriate online or offline tool to create and share ideas.</p> <p><b>Finding Information</b> choose an appropriate tool to help collect data. present data in an appropriate way. talk about mistakes in data and suggest how it could be checked.</p> <p>to use a search engine to find appropriate information and check its reliability, have an understanding of bias and authority evaluate different types of information I find on the World Wide Web. find out who the information on a webpage belongs to.</p>	<p>to decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program. to refine a procedure using repeat commands to improve a program. to use a variable to increase programming possibilities. to change an input to a program to achieve a different output. to use 'if' and 'then' commands to select an action. to talk about how a computer model can provide information about a physical system. to use logical reasoning to detect and debug mistakes in a program. to use logical thinking, imagination and creativity to extend a program.</p>
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	<p><u>Theme</u> – To infinity and beyond</p> <p><u>Suggested Project:</u></p> <p><b>Half term 1</b> - To write a 'how to' guide to an Alien.</p> <p><b>Half term 2</b> - To complete an information booklet on Microsoft Publisher and Excel that includes experiments, findings, analysis information and pictures to give information about space.</p>	<p><u>Theme</u> – Out of Africa</p> <p><u>Suggested Project:</u></p> <p>To independently create a presentation about everything they have learnt about Africa. This needs to be presented to their peers.</p>	<p><u>Theme</u> – Travellers</p> <p><u>Suggested Project:</u></p> <p>To create a Scratch game based on the 'boat race' the children can design their own version of the game but keep the sim of the game the same.</p>	
<b>Year 6</b>	<p><u>Learning Objectives:</u></p> <p><b>Protecting Devices</b> to be able to make choices to protect computers or devices from harm on the Internet.</p> <p><b>Online Etiquette</b> explain the consequences to myself and others of not communicating kindly and respectfully.</p> <p><b>Staying Safe</b> protect my password and other personal information.</p>	<p><u>Learning Objectives:</u></p> <p><b>Spread sheets and databases</b> use and create basic addition formulas including using Autosum Understand the parts of a formula Know how to extend a series of numbers Create formula to subtract, multiply and divide Know how to copy similar formulas</p>	<p><u>Learning Objectives:</u></p> <p>To deconstruct a problem into smaller steps, recognising similarities to solutions used before. To explain and program each of the steps in an algorithm. To evaluate the effectiveness and efficiency of an algorithm To continually test the programming of an algorithm.</p>	



	<p>explain the consequences of sharing too much about myself online. support friends to protect themselves and make good choices online, including reporting concerns to an adult. explain the consequences of spending too much time online or on a game.</p> <p><b>Presenting Information</b> present information in an appropriate way. talk about audience, atmosphere and structure when planning a particular outcome combine a range of media, recognising the contribution of each to achieve a particular outcome evaluate the effectiveness of my own work and the work of others. select an appropriate tool to communicate and collaborate online know how to record a commentary to go with a presentation investigate the similarities and differences of presentation tools i.e powerpoint and online tools</p>	<p><b>Presenting Information</b> present information in an appropriate way. talk about audience, atmosphere and structure when planning a particular outcome combine a range of media, recognising the contribution of each to achieve a particular outcome evaluate the effectiveness of my own work and the work of others. know how to record a commentary to go with a presentation</p>	<p>To recognise when I need to use a variable to achieve a required output. To use a variable and operators to stop a program To use different inputs (including sensors) to control a device or onscreen action and predict what will happen. to use logical reasoning to detect and correct errors in algorithms and programs To use algorithms that select a specific answers or outcome (if, then, when etc.) To recognise when to use the repeat algorithm in a given program</p>
	<p><u>Theme – World at War</u> <u>Suggested Project:</u> To create an infomercial based on ‘online battles’</p>	<p><u>Theme – S.O.S (Titanic)</u> <u>Suggested Project:</u> A unit based on ‘titanic by numbers’. Complete a data handling unit using Excel to allow the children to gain a good understanding of the purpose of the program and some of the functions</p>	<p><u>Theme – The Egyptians</u> <u>Suggested Project:</u> Create a scratch game that the children have designed themselves. This can be based on the Egyptians and their way of life. The children can practise their programming skills with instruction booklets for games such as clone wars and dodgeball.</p>