

## Whole School Computing Overview 2019-2020

	Information literacy	Media	Computer science	Data handling	E-Safety
Reception	<p>Uses technologies, with support, to find out more about the world around them.</p> <p>Recognises that a range of technology is used in places such as homes and schools. Selects and uses technology for particular purposes.</p>	<p>Uses and responds to real or improvised technological resources.</p> <p>Uses technologies to share experiences with others and share experiences of using technology.</p> <p>Uses technologies to enhance, change or recreate within a learning experience.</p> <p>Captures and documents a sequence of events or experiences using ICT.</p> <p>Finds out about and uses a range of technology. Selects appropriate applications that support an identified need.</p>	<p>Understands that the action of pressing a button/lifting flaps and operating simple mechanisms will result in a particular reaction.</p>	<p>Responds to photographs or digital media showing shared events/familiar people or places</p>	<p>To use technology with adult supervision</p>

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Subject	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer
Year 1	<p><b>Blake</b></p> <p><b>Media</b></p> <ul style="list-style-type: none"> <li>- Use text, images and sounds to record my ideas.</li> <li>- Understand sound and music can be created using a range of simple technology.</li> <li>- Record sound using the iPads or sound buttons and play back the recordings.</li> <li>- Create an image/animation in a simple graphics application (purple mash).</li> <li>- Capture images using a range of technologies and share with others.</li> </ul> <p><b>Esafety</b></p> <p>Identify trusted adults and ensure a trusted adult knows what they are doing online and inform them if online content makes them feel sad, scared or confused.</p>	<p><b>Computing Science</b></p> <ul style="list-style-type: none"> <li>- To understand what an algorithm is.</li> <li>- To master and explain what an algorithm is.</li> <li>- Optional additional lesson to consolidate/ achieve mastery.</li> <li>- To sequence a series of instructions to build an algorithm.</li> <li>- To use single step instructions to program a human robot using an algorithm.</li> <li>- To use single step instructions to program Beebot.</li> <li>- To use an algorithm to program on Purple Mash.</li> </ul> <p><b>Esafety</b></p> <p>Identify trusted adults and ensure a trusted adult knows what they are doing online and inform them if online content makes them feel sad, scared or confused.</p>	<p><b>Information Literacy</b></p> <ul style="list-style-type: none"> <li>-To know that I can find information in different ways (talk to people, read a book, watch a video, look at pictures, search online)</li> <li>-To use technology to research information (app, search, links)</li> <li>-To use the different buttons and links on a webpage to move about</li> </ul> <p><b>Esafety</b></p> <p>Behave in a kind and considerate way to others in the real and virtual world.</p>	<p><b>Data Handling</b></p> <ul style="list-style-type: none"> <li>- Sort, organise and classify objects on their properties. (using class whiteboard, pic collage or online software)</li> <li>- Represent and interpret simple data as pictograms. (purple mash)</li> </ul> <p><b>Esafety</b></p> <p>Behave in a kind and considerate way to others in the real and virtual world.</p>	<p><b>Cross curricular application of skills learnt earlier in the year.</b></p> <p><b>Teachers to identify areas of development which children need further support with.</b></p> <p><b>Esafety</b></p> <p>Understand that the internet is fun but just like there are rules in the real world to keep you safe there are rules for keeping them safe in the online world.</p>
	<p><b>Hill</b></p> <p><b>Computing Science</b></p> <ul style="list-style-type: none"> <li>- To understand what an algorithm is.</li> <li>- To master and explain what an algorithm is.</li> <li>- Optional additional lesson to consolidate/ achieve mastery.</li> <li>- To sequence a series of instructions to build an algorithm.</li> <li>- To use single step instructions to program a</li> </ul>	<p><b>Media</b></p> <ul style="list-style-type: none"> <li>- Use text, images and sounds to record my ideas.</li> <li>- Understand sound and music can be created using a range of simple technology.</li> <li>- Record sound using the iPads or sound buttons and play back the recordings.</li> <li>- Create an image/animation in a simple graphics application (purple mash).</li> <li>- Capture images using a range of technologies and share with others.</li> </ul>	<p><b>Data Handling</b></p> <ul style="list-style-type: none"> <li>- Sort, organise and classify objects on their properties. (using class whiteboard, pic collage or online software)</li> <li>- Represent and interpret simple data as pictograms. (purple mash)</li> </ul> <p><b>Esafety</b></p> <p>Behave in a kind and considerate way to others in the real and virtual world.</p>	<p><b>Information Literacy</b></p> <ul style="list-style-type: none"> <li>-To know that I can find information in different ways (talk to people, read a book, watch a video, look at pictures, search online)</li> <li>-To use technology to research information (app, search, links)</li> <li>-To use the different buttons and links on a webpage to move about</li> </ul> <p><b>Esafety</b></p>	<p><b>Cross curricular application of skills learnt earlier in the year.</b></p> <p><b>Teachers to identify areas of development which children need further support with.</b></p> <p><b>Esafety</b></p> <p>Understand that the internet is fun but just like there are rules in the real world to keep you safe there are rules for keeping them safe in the online world.</p>

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	human robot using an algorithm. - To use single step instructions to program Beebot. - To use an algorithm to program on Purple Mash. <b>Esafety</b> Identify trusted adults and ensure a trusted adult knows what they are doing online and inform them if online content makes them feel sad, scared or confused.	<b>Esafety</b> Identify trusted adults and ensure a trusted adult knows what they are doing online and inform them if online content makes them feel sad, scared or confused.		Behave in a kind and considerate way to others in the real and virtual world.	
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Subject	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer	
Year 2	<b>Blake Media</b> - To change the font, text size and colour to improve my work. - To save and open my work on the computer. - To use titles, paragraphs and graphics to improve my work. - To use pre-recorded sounds and record appropriate sounds (voice and singing) to create, edit and refine musical phrases. - To take clear pictures deleting and reshooting when needed. - To crop, re-colour and resize pictures. - To understand and create simple animations.	<b>Computing Science</b> - To use multistep instructions to program a human robot using an algorithm. - To use prediction skills to identify a successful algorithm. - To predict and debug an algorithm. - To use command blocks to write an algorithm on Scratch Junior. - To use prediction skills to explain an algorithm made by Scratch Junior command blocks. - To use Scratch junior to program an algorithm. - To use my knowledge of programming and algorithms on purple mash. - To identify how I use technology outside school.	<b>Information Literacy</b> - To choose which pictures, videos, sounds and writing I can find online to use to help my learning. - To use specific website addresses, links and menus to locate information. - To use child friendly search engines to find information.	<b>Data Handling</b> - To show information as a simple block graph or pictogram. - To organise and interpret data as a simple graph. - To sort and answer questions using yes/no answers.	<b>Cross curricular application of skills learnt earlier in the year.</b>  <b>Teachers to identify areas of development which children need further support with.</b>  <div> <b>Esafety</b>            Talk to a trusted adult before sharing information about themselves online.         </div> <div> <b>Esafety</b>            Know that some of the people they interact with online may not be who they say they are.         </div>	
	<b>Hill Computing Science</b> - To use multistep instructions to program a human robot using an algorithm.	<b>Media</b> - To change the font, text size and colour to improve my work. - To save and open my work on the computer.	<b>Data Handling</b> - To show information as a simple block graph or pictogram. - To organise and interpret data as a simple graph.	<b>Information Literacy</b> - To choose which pictures, videos, sounds and writing I can find online to use to help my learning.	<b>Cross curricular application of skills learnt earlier in the year.</b>  <b>Teachers to identify areas of development which children need further support with.</b>	

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	<ul style="list-style-type: none"> <li>- To use prediction skills to identify a successful algorithm.</li> <li>- To predict and debug an algorithm.</li> <li>- To use command blocks to write an algorithm on Scratch Junior.</li> <li>- To use prediction skills to explain an algorithm made by Scratch Junior command blocks.</li> <li>- To use Scratch junior to program an algorithm.</li> <li>- To use my knowledge of programming and algorithms on purple mash.</li> <li>- To identify how I use technology outside school.</li> </ul> <p><b>Esafety</b> Know login details and passwords should only be shared with trusted adults.</p>	<ul style="list-style-type: none"> <li>- To use titles, paragraphs and graphics to improve my work.</li> <li>- To use pre-recorded sounds and record appropriate sounds (voice and singing) to create, edit and refine musical phrases.</li> <li>- To take clear pictures deleting and reshooting when needed.</li> <li>- To crop, re-colour and resize pictures.</li> <li>- To understand and create simple animations.</li> </ul> <p><b>Esafety</b> Understand that they can be connected to many people in their life (real life and online).</p>	<ul style="list-style-type: none"> <li>- To sort and answer questions using yes/no answers.</li> </ul> <p><b>Esafety</b> Understand that they can be connected to many people in their life (real life and online).</p>	<ul style="list-style-type: none"> <li>-To use specific website addresses, links and menus to locate information.</li> <li>-To use child friendly search engines to find information.</li> </ul> <p><b>Esafety</b> Be polite and respectful when communicating &amp; playing games online.</p>	<p><b>Esafety</b> Talk to a trusted adult before sharing information about themselves online.</p>	<p><b>Esafety</b> Know that some of the people they interact with online may not be who they say they are.</p>
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Subject	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer	
Year 3	<b>Blake Media</b> - To explore digitally created texts and identify the key features. - To combine and refine text, sound and graphics to communicate information for a given audience. (text, audio and graphics; text boxes, columns; spell checker and thesaurus; cut, copy and paste) - To capture, create and enhance new and existing digital images. (crop, age etc) - To incorporate sounds into a presentation (such as a powerpoint or iMovie) - To plan and create a simple animation. - To evaluate and edit work I complete on the computer.		<b>Information Literacy</b> - To use keywords to search effectively. - To copy, paste and edit appropriate information into my work. (text, pictures) - To use graphics, links and text to find my way around web pages.		<b>Data Handling</b> -To collect and organise information to find answers to questions. -To create different graphs that show data for different purposes across the curriculum. - To store and access data using a database.	
	<b>Esafety</b> Identify the dangers of clicking links they receive when using technology.	<b>Esafety</b> Identify personal information about themselves and others.	<b>Esafety</b> Identify personal information about themselves and others.	<b>Esafety</b> Explain the possible consequences of sharing personal information online.	<b>Esafety</b> Know that bullying through the use of technology is called cyberbullying and how to report it.	<b>Esafety</b> Understand that not all information you access online is accurate or reliable.

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	<b>Hill</b> <b>Information Literacy</b> <ul style="list-style-type: none"> <li>- To use keywords to search effectively.</li> <li>- To copy, paste and edit appropriate information into my work. (text, pictures)</li> <li>- To use graphics, links and text to find my way around web pages.</li> </ul>		<b>Media</b> <ul style="list-style-type: none"> <li>- To explore digitally created texts and identify the key features.</li> <li>- To combine and refine text, sound and graphics to communicate information for a given audience. (text, audio and graphics; text boxes, columns; spell checker and thesaurus; cut, copy and paste)</li> <li>- To capture, create and enhance new and existing digital images. (crop, age etc)</li> <li>- To incorporate sounds into a presentation (such as a powerpoint or iMovie)</li> <li>- To plan and create a simple animation.</li> <li>- To evaluate and edit work I complete on the computer.</li> </ul>		<b>Data Handling</b> <ul style="list-style-type: none"> <li>- To collect and organise information to find answers to questions.</li> <li>- To create different graphs that show data for different purposes across the curriculum.</li> <li>- To store and access data using a database.</li> </ul>	
	<b>Esafety</b> Identify the dangers of clicking links they receive when using technology.	<b>Esafety</b> Identify personal information about themselves and others.	<b>Esafety</b> Identify personal information about themselves and others.	<b>Esafety</b> Explain the possible consequences of sharing personal information online.	<b>Esafety</b> Know that bullying through the use of technology is called cyberbullying and how to report it.	<b>Esafety</b> Understand that not all information you access online is accurate or reliable.

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<b>Year 4</b>	<b>Blake</b> <b>Media</b> <ul style="list-style-type: none"> <li>- To capture appropriate, quality still and moving images.</li> <li>- To plan and create an animation, film or slideshow.</li> <li>- To know that there are different film shots and when to use them.</li> <li>- To compose, combine and refine music or sounds.</li> <li>- To identify features of good digital creation design. (ideal for comparing presentations or for animation)</li> <li>- To create a 2D plan view using basic shapes.</li> <li>- To collect, create and insert appropriate picture and sound files to create a multimedia presentation.</li> </ul>		<b>Information Literacy</b> <ul style="list-style-type: none"> <li>- To use a variety of keywords, read website summaries and search engine ranking to accurately search online.</li> <li>- To skim read and compare websites to retrieve accurate, reliable information.</li> <li>- To know that different searches can be used to find images or sounds.</li> </ul>		<b>Data Handling</b> <ul style="list-style-type: none"> <li>- To represent data in a database using appropriate data types.</li> <li>- To turn questions into search criteria and use database tools to find answers.</li> <li>- To use a spreadsheet to enter data and perform simple calculations.</li> <li>- To convert data in a spreadsheet into different graph types for different purposes.</li> <li>- To change elements of a spreadsheet and understand the effects on other calculations.</li> </ul>

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	<b>Esafety</b> Identify age limits and PEGI ratings for games and understand the importance of only accessing age appropriate content.	<b>Esafety</b> Explain the possible consequences of submitting personal information online.	<b>Esafety</b> Ensure information submitted online is only accessed by the people they trust.	<b>Esafety</b> Identify the similarities and differences of virtual and real world communication to develop an understanding of positive online communication.	<b>Esafety</b> Identify the similarities and differences of virtual and real world communication to develop an understanding of positive online communication.	<b>Esafety</b> Use strong passwords for all online accounts and devices.
	<b>Hill</b> <b>Information Literacy</b> <ul style="list-style-type: none"> <li>- To use a variety of keywords, read website summaries and search engine ranking to accurately search online.</li> <li>- To skim read and compare websites to retrieve accurate, reliable information.</li> <li>- To know that different searches can be used to find images or sounds.</li> </ul>		<b>Media</b> <ul style="list-style-type: none"> <li>- To capture appropriate, quality still and moving images.</li> <li>- To plan and create an animation, film or slideshow.</li> <li>- To know that there are different film shots and when to use them.</li> <li>- To compose, combine and refine music or sounds.</li> <li>- To identify features of good digital creation design. (ideal for comparing presentations or for animation)</li> <li>- To create a 2D plan view using basic shapes.</li> <li>- To collect, create and insert appropriate picture and sound files to create a multimedia presentation.</li> </ul>		<b>Data Handling</b> <ul style="list-style-type: none"> <li>- To represent data in a database using appropriate data types.</li> <li>- To turn questions into search criteria and use database tools to find answers.</li> <li>- To use a spreadsheet to enter data and perform simple calculations.</li> <li>- To convert data in a spreadsheet into different graph types for different purposes.</li> <li>- To change elements of a spreadsheet and understand the effects on other calculations.</li> </ul>	
	<b>Esafety</b> Identify age limits and PEGI ratings for games and understand the importance of only accessing age appropriate content.	<b>Esafety</b> Explain the possible consequences of submitting personal information online.	<b>Esafety</b> Ensure information submitted online is only accessed by the people they trust.	<b>Esafety</b> Identify the similarities and differences of virtual and real world communication to develop an understanding of positive online communication.	<b>Esafety</b> Identify the similarities and differences of virtual and real world communication to develop an understanding of positive online communication.	<b>Esafety</b> Use strong passwords for all online accounts and devices.

Subject	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer
Year 5	<b>Blake</b> <b>Media</b>		<b>Information Literacy</b>		<b>Media</b> <ul style="list-style-type: none"> <li>- To create charts using appropriate data to interpret and answer a specific question.</li> </ul>



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<ul style="list-style-type: none"> <li>- To create, group, enhance and resize a range of 2D graphic shapes.</li> <li>- To create and manipulate simple 3D shapes to make simple models.</li> <li>- To plan, create and edit an animation, film, slideshow or presentation, then make edits to improve.</li> <li>- To source, edit and refine music and sound for a given audience or project.</li> <li>- To develop criteria for evaluating theirs and others work.</li> </ul>	<p><b>Esafety</b> Understand the terms plagiarism and copyright and be aware of the implications of copying and sharing content without permission.</p>	<p><b>Esafety</b> Use blocking / unsubscribing / reporting mechanisms appropriately.</p>	<ul style="list-style-type: none"> <li>- To find information from a range of online places and determine which is reliable/ unreliable.</li> <li>- To know that information online can be irrelevant, biased or incorrect because anyone can post.</li> <li>- To know examples of reliable/ unreliable websites eg blogs, you tube, wikipedia</li> <li>- To know that I can use search engines to find a range of information eg. calculator, conversion tool, distance and maps, translations.</li> </ul>	<p><b>Esafety</b> Control who they interact with online and the information they share.</p>	<p><b>Esafety</b> Control who they interact with online and the information they share.</p>	<ul style="list-style-type: none"> <li>-To create a database to store and search relevant information.</li> <li>- To interrogate a database using suitable questions.</li> <li>- To use technology to search and sift through large amounts of different types of information.</li> <li>- To use a range of calculations and functions in a spreadsheet.</li> <li>- To use a spreadsheet to model given problems.</li> </ul>
<p><b>Information Literacy</b></p> <ul style="list-style-type: none"> <li>- To find information from a range of online places and determine which is reliable/ unreliable.</li> <li>- To know that information online can be irrelevant, biased or incorrect because anyone can post.</li> <li>- To know examples of reliable/ unreliable websites eg blogs, you tube, wikipedia</li> <li>- To know that I can use search engines to find a range of information eg. calculator, conversion tool, distance and maps, translations.</li> </ul>	<p><b>Esafety</b> Understand the terms plagiarism and copyright and be aware of the implications of copying and sharing content without permission.</p>	<p><b>Esafety</b> Use blocking / unsubscribing / reporting mechanisms appropriately.</p>	<p><b>Media</b></p> <ul style="list-style-type: none"> <li>- To create, group, enhance and resize a range of 2D graphic shapes.</li> <li>- To create and manipulate simple 3D shapes to make simple models.</li> <li>- To plan, create and edit an animation, film, slideshow or presentation, then make edits to improve.</li> <li>- To source, edit and refine music and sound for a given audience or project.</li> <li>- To develop criteria for evaluating theirs and others work.</li> </ul>	<p><b>Esafety</b> Control who they interact with online and the information they share.</p>	<p><b>Esafety</b> Control who they interact with online and the information they share.</p>	<p><b>Media</b></p> <ul style="list-style-type: none"> <li>- To create charts using appropriate data to interpret and answer a specific question.</li> <li>-To create a database to store and search relevant information.</li> <li>- To interrogate a database using suitable questions.</li> <li>- To use technology to search and sift through large amounts of different types of information.</li> <li>- To use a range of calculations and functions in a spreadsheet.</li> <li>- To use a spreadsheet to model given problems.</li> </ul>

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Subject	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer
Year 6	<b>Blake</b> <b>Media</b> <ul style="list-style-type: none"> <li>- To independently combine various forms of media purposefully as part of a project.</li> <li>- To use a CAD application (3D design tool) to create a representation of an object.</li> <li>- To edit and manipulate multi-track music and sound and refine for a given audience or project.</li> <li>- To evaluate and adapt individual features to enhance the overall presentation.</li> </ul>		<b>Information Literacy</b> <ul style="list-style-type: none"> <li>- To check plausibility of information from a variety of chosen sources on the same topic.</li> <li>- To make informed judgments as to the validity of information on a website and be aware of bias.</li> <li>- To understand how search engines work and rank results.</li> </ul>		<b>Data Handling</b> <ul style="list-style-type: none"> <li>-To identify and collect appropriate data to answer their questions.</li> <li>-To use data in an appropriate application to test a theory/hypothesis.</li> <li>-To refine, search, filter, sort and graph data for purpose in a database or spreadsheet.</li> <li>-To use a spreadsheet to create real life models of information to offer a solution to a real life problem.</li> <li>-To collect and represent data using infographics such as word clouds.</li> </ul>
	<b>Esafety</b> Explain the importance of a balanced lifestyle re to technology use.	<b>Esafety</b> Explain the importance of a balanced lifestyle with respect to technology use.	<b>Esafety</b> Explain the importance of a positive 'digital footprint'.	<b>Esafety</b> Explain the importance of a positive 'digital footprint'.	<b>Esafety</b> Appropriately configured and secure all devices used to access personal data.
	<b>Hill</b> <b>Information Literacy</b> <ul style="list-style-type: none"> <li>- To check plausibility of information from a variety of chosen sources on the same topic.</li> <li>- To make informed judgments as to the validity of information on a website and be aware of bias.</li> <li>- To understand how search engines work and rank results.</li> </ul>		<b>Media</b> <ul style="list-style-type: none"> <li>- To independently combine various forms of media purposefully as part of a project.</li> <li>- To use a CAD application (3D design tool) to create a representation of an object.</li> <li>- To edit and manipulate multi-track music and sound and refine for a given audience or project.</li> <li>- To evaluate and adapt individual features to enhance the overall presentation.</li> </ul>		<b>Data Handling</b> <ul style="list-style-type: none"> <li>-To identify and collect appropriate data to answer their questions.</li> <li>-To use data in an appropriate application to test a theory/hypothesis.</li> <li>-To refine, search, filter, sort and graph data for purpose in a database or spreadsheet.</li> <li>-To use a spreadsheet to create real life models of information to offer a solution to a real life problem.</li> <li>-To collect and represent data using infographics such as word clouds.</li> </ul>
	<b>Esafety</b> Explain the importance of a balanced lifestyle re to technology use.	<b>Esafety</b> Explain the importance of a balanced lifestyle	<b>Esafety</b> Explain the importance of a	<b>Esafety</b> Explain the importance of a	<b>Esafety</b> Appropriately configured and secure all devices
					<b>Esafety</b> Evaluate whether games, websites & social media are age appropriate.



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	with respect to technology use.	positive 'digital footprint'.	positive 'digital footprint'.	used to access personal data.	social media are age appropriate.
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