



Eastfield Primary School – Computing Curriculum Skills Progression – 2020

	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Theme & Focus	Autumn: <u>Its rhyme time</u> <u>Helping Hands</u> Spring: <u>Once Upon a time</u> <u>The land before time</u> Summer: <u>In our back garden</u> <u>What a wonderful world!</u>	Autumn: <u>Home sweet home</u> *programming *artist Spring: <u>Out of this world</u> *research & e-safety *publishing Summer: <u>Land Ahoy</u> *designing *broadcasting	Autumn: <u>Travelling around</u> *animation *programming Spring: <u>London's burning</u> *data handling *research & e-safety Summer: <u>Wonder women</u> *music *film make	Autumn: <u>Meet the Flintstones</u> *programming *artist Spring: <u>Building an empire</u> *research & e-safety *publishing Summer: <u>Street detectives</u> *designing *broadcasting	Autumn: <u>Tomb raiders</u> *animation *programming Spring: <u>Let the Battle commence!</u> *data handling *research & e-safety Summer: <u>A large and dirty town</u> *music *film make	Autumn: <u>Greece lightning</u> *programming *animation Spring: <u>Conquering castles</u> *research & e-safety *publishing Summer: <u>Black by day and red by night</u> *designing *broadcasting	Autumn: <u>Mexican hats</u> *artist *programming 1 Spring: <u>Nautical know-how</u> *data handling *research & e-safety Summer: <u>The war at home</u> *programming 2 *film make

Skills							
<p><u>Technology in our lives</u></p>	<ul style="list-style-type: none"> • Know that pressing buttons can make something happen 	<ul style="list-style-type: none"> · I can recognise the ways we use technology in our classroom. · I can recognise ways that technology is used in my home and community. · I can use links to websites to find information. · I can begin to identify some of the benefits of using technology. 	<ul style="list-style-type: none"> · I can tell you why I use technology in the classroom. · I can tell you why I use technology in my home and community. · I am starting to understand that other people have created the information I use. · I can identify benefits of using technology including finding information, creating and communicating. · I can talk about the differences between the Internet and things in the physical world. 	<ul style="list-style-type: none"> · I can save and retrieve work on the Internet, the school network or my own device. · I can tell you ways to communicate with others online. · I can describe the World Wide Web as the part of the Internet that contains websites. · I can use safe search tools to find and use an appropriate website. · I think about whether I can use images that I find online in my own work. 	<ul style="list-style-type: none"> · I can identify key words to use when searching safely on the World Wide Web. · I think about the reliability of information I read on the World Wide Web. · I can tell you how to check who owns photos, text and clipart. · I can create a hyperlink to a resource on the World Wide Web. 	<ul style="list-style-type: none"> · I can describe different parts of the Internet. · I can use different online communication tools for different purposes. · I can use a safe search engine to find appropriate information and check its reliability. · I can recognise and evaluate different types of information I find on the World Wide Web. · I can find out who the information on a webpage belongs to. 	<ul style="list-style-type: none"> · I can tell you the Internet services I need to use for different purposes. · I can describe how information is transported on the Internet. · I can select an appropriate tool to communicate and collaborate online. · I can talk about the way search results are selected and ranked. · I can evaluate the reliability of a website. · I can tell you about copyright and acknowledge the sources of information that I find online.

<p>Programming</p>	<p>•Make a remote control toy move</p>	<ul style="list-style-type: none"> · I can give instructions to my friend and follow their instructions to move around. · I can describe what happens when I press buttons on a robot. · I can press the buttons in the correct order to make my robot do what I want. · I can describe the actions I will need to make something happen and begin to use the word algorithm. · I can begin to predict what will happen for a short sequence of instructions. · I can begin to use software/apps to create movement and patterns on a 	<ul style="list-style-type: none"> · I can give instructions (using forward, backward and turn) and physically follow instructions myself. · I can tell you the order I need to do things to make something happen and talk about this as an algorithm. · I can program a robot or software to do a particular task. · I can look at a simple 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. 	<ul style="list-style-type: none"> · I can break an open-ended problem up into smaller parts. · I can put programming commands into a sequence to achieve a specific outcome. · I keep testing my program and can recognise when I need to debug it. · I can use repeat commands. · I can describe the algorithm I will need for a simple task. · I can detect a problem in an algorithm which could result in unsuccessful programming. 	<ul style="list-style-type: none"> · I can use logical thinking to solve an open-ended problem by breaking it up into smaller parts. · I can use an efficient procedure to simplify a program. · I know that I need to keep testing my program while I am putting it together. · I can recognise an error in a program and debug it. · I recognise that an algorithm will help me to sequence more complex programs. · I recognise that using algorithms will also help solve problems in other learning 	<ul style="list-style-type: none"> · I can decompose a problem into smaller parts to design an algorithm for a specific outcome · I can refine a procedure using repeat commands to improve a program. · I can change an input to a program to achieve a different output. · I can use 'if' and 'then' commands to select an action. · I can talk about how a computer model can provide information about a physical system. · I can use logical reasoning to detect and debug mistakes in a program. · I can use logical 	<ul style="list-style-type: none"> · I can deconstruct a problem into smaller steps, recognising similarities to solutions used before. · I can explain and program each of the steps in my algorithm. · I can evaluate the effectiveness and efficiency of my algorithm while I continually test its programming. · I can recognise when I need to use a variable to achieve a required output. · I can use a variable and operators to stop a program. · I can use different inputs (including sensors) to control a device or onscreen action
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		<p>screen.</p> <ul style="list-style-type: none"> · I can use the word debug when I correct mistakes when I program. 				<p>thinking to extend a program.</p>	<p>and predict the outcome.</p> <ul style="list-style-type: none"> · I can use logical reasoning to detect and correct errors in a algorithms and programs.
<u>Animate</u>	<ul style="list-style-type: none"> • Help create models appropriate for stop-motion animation with support 		<ul style="list-style-type: none"> · I can use technology to organise and present my ideas in different ways. 		<ul style="list-style-type: none"> · I can use photos, video and sound to create an atmosphere when presenting to different audiences. · I am confident to explore new media to extend what I can achieve. 	<ul style="list-style-type: none"> · I can use text, photo, sound and video editing tools to refine my work. · I can use the skills I have already developed to create content using unfamiliar technology. · I can select, use and combine the appropriate technology tools to create effects that will have an impact on others. 	
<u>Broadcast</u>		<ul style="list-style-type: none"> · I can talk about the different ways in which information can be shown. · I can use technology to 		<ul style="list-style-type: none"> · I can create different effects with different technology tools. 		<ul style="list-style-type: none"> · I can use text, photo, sound and video editing tools to refine my work. · I can use the skills I have 	

		<p>collect information, including photos, video and sound.</p> <ul style="list-style-type: none"> · I can be creative with different technology tools like cameras, robots, laptops and tablets. · I can use technology to create and present my ideas (e.g. recording sound, drawing digitally) 		<ul style="list-style-type: none"> · I can combine a mixture of text, graphics and sound to share my ideas and learning. · I can use a keyboard confidently and make use of a spellchecker to write and review my work. · I can evaluate my work and improve its effectiveness. 		<p>already developed to create content using unfamiliar technology.</p> <ul style="list-style-type: none"> · I can select, use and combine the appropriate technology tools to create effects that will have an impact on others. · I can select an appropriate online or offline tool to create and share ideas. 	
Artist	<ul style="list-style-type: none"> • Create simple digital artwork using basic software (eg on a touch screen device or IWB) 	<ul style="list-style-type: none"> · I can be creative with different technology tools like cameras, robots, laptops and tablets. · I can use technology to create and present my ideas (e.g. recording sound, drawing digitally) · I can use the keyboard or a 		<ul style="list-style-type: none"> · I can create different effects with different technology tools. · I can combine a mixture of text, graphics and sound to share my ideas and learning. 			<ul style="list-style-type: none"> · I can talk about audience, atmosphere and structure when planning a particular outcome. · I can confidently identify the potential of unfamiliar technology to increase my creativity.

		<p>word bank on my device to add, delete and space text for others to read.</p> <ul style="list-style-type: none"> · I can save information in a special place and retrieve it again. 					<ul style="list-style-type: none"> · I can select and combine a range of media, recognising how each helps to achieve a particular outcome.
Publish	<ul style="list-style-type: none"> • Type some simple words 	<ul style="list-style-type: none"> · I can talk about the different ways in which information can be shown. · I can use technology to collect information, including photos, video and sound. · I can use technology to create and present my ideas (e.g. recording sound, drawing digitally) · I can use the keyboard or a word bank on my device to add, delete and space text for others to 		<ul style="list-style-type: none"> · I can combine a mixture of text, graphics and sound to share my ideas and learning. · I can use a keyboard confidently and make use of a spellchecker to write and review my work. · I can evaluate my work and improve its effectiveness. · I can use an appropriate tool to share my work online. 		<ul style="list-style-type: none"> · I can use text, photo, sound and video editing tools to refine my work. · I can use the skills I have already developed to create content using unfamiliar technology. · I can select, use and combine the appropriate technology tools to create effects that will have an impact on others. · I can review and improve my own work and support others to improve their work. 	

		<p>read.</p> <ul style="list-style-type: none"> · I can save information in a special place and retrieve it again. 					
Handling Data			<ul style="list-style-type: none"> · I talk about different ways I use technology to collect information, including a camera or sound recorder. · I can make and save a chart or graph using the data I collect. · I can talk about the data that is shown in my chart or graph. · I am starting to understand a branching database. · I can tell you what kind of information I could use to help me investigate a question. 		<ul style="list-style-type: none"> · I can collect data and identify where it could be inaccurate. · I can plan, create and search a database or spreadsheet to answer questions. · I can choose the best way to present data to my friends. · I can use a data logger to record and share my readings with my friends. 		<ul style="list-style-type: none"> · I can select the most effective tool to collect data for my investigation. · I can check the data I collect for accuracy and plausibility. · I can present and interpret the data I collect in an appropriate way. · I use the skills I have developed to interrogate a database.

Research & Present	<ul style="list-style-type: none"> •View selected websites led by an adult. 	<ul style="list-style-type: none"> · I can talk about the different ways in which information can be shown. · I can use technology to collect information, including photos, video and sound. · I can use technology to create and present my ideas (e.g. recording sound, drawing digitally) 	<ul style="list-style-type: none"> · I can use technology to organise and present my ideas in different ways. · I can use appropriate keyboard commands to amend text on my device, including using a spellchecker. · I can tell you about an online tool that will help me to share my ideas with other people. 	<ul style="list-style-type: none"> · I can combine a mixture of text, graphics and sound to share my ideas and learning. · I can use a keyboard confidently and make use of a spellchecker to write and review my work. · I can evaluate my work and improve its effectiveness. · I can use an appropriate tool to share my work online. 	<ul style="list-style-type: none"> · I can change the appearance of text to increase its effectiveness. · I can create, modify and present documents for a particular purpose. · I can give constructive feedback to my friends to help them improve their work and refine my own work. 	<ul style="list-style-type: none"> · I can use text, photo, sound and video editing tools to refine my work. · I can use the skills I have already developed to create content using unfamiliar technology. · I can select, use and combine the appropriate technology tools to create effects that will have an impact on others. · I can select an appropriate online or offline tool to create and share ideas. · I can review and improve my own work and support others to improve their work. 	<ul style="list-style-type: none"> · I can talk about audience, atmosphere and structure when planning a particular outcome. · I can select and combine a range of media, recognising how each helps to achieve a particular outcome. · I can tell you why I select a particular online tool for a specific purpose. · I can be digitally discerning when evaluating the effectiveness of my own work and the work of others.
Design		<ul style="list-style-type: none"> · I can be creative with different technology tools like cameras, robots, 		<ul style="list-style-type: none"> · I can create different effects with different technology tools. 		<ul style="list-style-type: none"> · I can use text, photo, sound and video editing tools to refine my work. 	

		laptops and tablets.				· I can use the skills I have already developed to create content using unfamiliar technology.	
Music	• Record sounds or voices with a device		· I can use technology to organise and present my ideas in different ways. · I can save and open files on the device I use.		· I can use photos, video and sound to create an atmosphere when presenting to different audiences. · I am confident to explore new media to extend what I can achieve.		

<p>Film-make</p>	<ul style="list-style-type: none"> • Know what a camera does 		<ul style="list-style-type: none"> · I can use technology to organise and present my ideas in different ways. · I can use appropriate keyboard commands to amend text on my device, including using a spellchecker. · I can save and open files on the device I use. 		<ul style="list-style-type: none"> · I can use photos, video and sound to create an atmosphere when presenting to different audiences. · I am confident to explore new media to extend what I can achieve. · I can use an appropriate tool to share my work and collaborate online. 		<ul style="list-style-type: none"> · I can talk about audience, atmosphere and structure when planning a particular outcome. · I can confidently identify the potential of unfamiliar technology to increase my creativity. · I can select and combine a range of media, recognising how each helps to achieve a particular outcome.
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<p>E=safety</p>	<ul style="list-style-type: none"> • understand that the internet can be dangerous 	<ul style="list-style-type: none"> · I can keep a password private. · I can tell you what personal information is. · I know who to tell when I see something unexpected or worrying online. · I can talk about why it's important to be kind and polite. · I can agree and follow sensible e-Safety rules. 	<ul style="list-style-type: none"> · I can explain why I need to keep my password and personal information private. · I can describe the things that happen online that I must tell an adult about. · I can talk about why I should only go online for a short amount of time. · I can talk about why it is important to be kind and polite online and in real life. · I know that not everyone is who they say they are on the Internet. 	<ul style="list-style-type: none"> · I can talk about what makes a secure password and why they are important. · I can protect my personal information when I do different things online. · I can use the safety features of websites as well as reporting concerns to an adult. · I can recognise websites and games appropriate for my age. · I can post positive comments in an online environment 	<ul style="list-style-type: none"> · I choose a secure password and screen name when I am using a website. · I can talk about the ways I can protect myself and my friends from harm online. · I know how to use the safety features of websites as well as reporting concerns to an adult. · I know that anything I share online can be seen by others. · I can talk about why I should ask a trusted adult before downloading files and games from the Internet. · I comment positively and respectfully online and through text 	<ul style="list-style-type: none"> · I understand how to create a secure password and screen name. · I protect passwords and other personal information. · I can explain why I need to protect myself and friends and the best ways to do this, e.g reporting to adults. · I know that anything I post online can be seen, used and may affect others. · I can talk about the dangers of spending too long online or playing a game. · I can explain the importance of communicating kindly and respectfully. 	<ul style="list-style-type: none"> · I can explain the consequences of sharing too much about myself online. · I support my friends to protect themselves and make good choices online. · I can explain the consequences of spending too much time online or on a game. · I can explain the consequences to myself and others of not communicating kindly and respectfully. · I can show how to protect my computer or device from harm on the Internet.
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					messages.	<ul style="list-style-type: none">· I can explain why I need to protect my computer or device from harm.· I can discuss the importance of choosing an age-appropriate website, app or game.	
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