



Abbey Park Primary School

Belonging, Achieving, Thriving

Computing Progression of Key Skills

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
E-Safety	<p>I can keep my password private.</p> <p>I can tell you what personal information is.</p> <p>I can tell an adult when I see something unexpected or worrying online.</p> <p>I can talk about why it's important to be kind and polite.</p> <p>I can recognise an age appropriate website.</p> <p>I can agree and follow sensible e-Safety rules.</p>	<p>I can explain why I need to keep my password and personal information private.</p> <p>I can describe the things that happen online that I must tell an adult about.</p> <p>I can talk about why I should go online for a short amount of time.</p> <p>I can talk about why it is important to be kind and polite online and in real life.</p> <p>I know that not everyone is who</p>	<p>I can talk about what makes a secure password and why they are important.</p> <p>I can protect my personal information when I do different things online.</p> <p>I can use the safety features of websites as well as reporting concerns to an adult.</p> <p>I can recognise websites and games appropriate for my age.</p> <p>I can make good choices about how</p>	<p>I choose a secure password and screen name when I am using a website.</p> <p>I can talk about the ways I can protect myself and my friends from harm online.</p> <p>I use the safety features of websites as well as reporting concerns to an adult.</p> <p>I know that anything I share online can be seen by others.</p> <p>I choose websites, apps and games that are</p>	<p>I can choose a secure password and screen name and I protect my password and other personal information.</p> <p>I can explain why I need to protect myself and my friends and the best ways to do this, including reporting concerns to an adult.</p> <p>I know that anything I post online can be seen, used and may affect others.</p> <p>I can talk about the dangers of spending too long</p>	<p>I protect my password and other personal information.</p> <p>I can explain the consequences of sharing too much about myself online.</p> <p>I support my friends to protect themselves and make good choices online, including reporting concerns to an adult.</p> <p>I can explain the consequences of spending too much time online or on a game.</p>	<p>I can recognise the risks associated with the sharing of personal information digitally and to take actions to protect themselves.</p> <p>I can agree and use simple criteria and understand how to improve their work.</p> <p>I can acknowledge sources and recognise copyrights.</p> <p>I can explain the reason for choices they have made.</p>

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		they say they are on the Internet.	long I spend online. I ask an adult before downloading files and games from the Internet. I can understand I should only post positive comments online.	appropriate for my age. I can help my friends make good choices about the time they spend online. I can talk about why I need to ask a trusted adult before downloading files and games from the Internet.	online or playing a game. I can explain the importance of communicating kindly and respectfully. I can discuss the importance of choosing an age-appropriate website, app or game. I can explain why I need to protect my computer or device from harm.	I can explain the consequences to myself and others of not communicating kindly and respectfully. I protect my computer or device from harm on the Internet.	
Programming - Understanding algorithms	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	I can give instructions to my friend (using forward, backward and turn) and physically follow their instructions. I can tell you the order I need to do things to make something happen and talk about this as an algorithm.	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 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	I can decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program. I can refine a procedure using repeat commands to improve a program.	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	I can design, write, debug and then code algorithms, that: - 1-Apply the computational thinking techniques e.g. decomposition and computer science techniques 2- Select more than one programming language. –

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	<p>make my robot do what I want.</p> <p>I can describe what actions I will need to do to make something happen and begin to use the word algorithm.</p> <p>I can begin to predict what will happen for a short sequence of instructions.</p> <p>I can begin to use software/apps to create movement and patterns on a screen.</p> <p>I can use the word debug when I correct mistakes when I program.</p>	<p>I can program a robot or software to do a particular task.</p> <p>I can look at my friend's program and tell you what will happen.</p> <p>I can use programming software to make objects move.</p> <p>I can watch a program execute and spot where it goes wrong so that I can debug it.</p>	<p>I need to debug it.</p> <p>I can use repeat commands.</p> <p>I can describe the algorithm I will need for a simple task.</p> <p>I can detect a problem in an algorithm which could result in unsuccessful programming.</p>	<p>program while I am putting it together.</p> <p>I can use a variety of tools to create programs.</p> <p>I can recognise an error in a program and debug it.</p> <p>I recognise that an algorithm will help me to sequence more complex programs.</p> <p>I recognise that using algorithms will also help solve problems in other learning such as Maths, Science and Design</p>	<p>I can use a variable to increase programming possibilities.</p> <p>I can change an input to a program to achieve a different output.</p> <p>I can use 'if' and 'then' commands to select an action.</p> <p>I can talk about how a computer model can provide information about a physical system.</p> <p>I can use logical reasoning to detect and debug mistakes in a program.</p>	<p>and efficiency of my algorithm while I continually test the programming of that algorithm.</p> <p>I can recognise when I need to use a variable to achieve a required output.</p> <p>I can use a variable and operators to stop a program.</p> <p>I can use different inputs (including sensors) to control a device or onscreen action and predict what will happen.</p> <p>I can use logical reasoning to detect and correct errors in a algorithms and programs.</p>	<p>3- Use a range of more complex techniques, to produce more efficient and effective coding solutions. –</p> <p>4-Identify the issues associated with coding techniques and performance.</p> <p>I know what a Micobit is.</p> <p>I can programme a Micobit using a block editor and debug my own program.</p> <p>I can undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices</p> <p>I can understand how instructions are stored and</p>

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							<p>executed within a computer system.</p> <p>I can rationalise a set of instructions by repeating sections</p> <p>I can plan and implement set of instruction predicting outcomes before execution.</p> <p>I can recognise that sequencing instructions is fundamental to a wide range of ICT applications</p> <p>I can agree and use simple criteria and understand how to improve their work.</p>
Information Handling	I can talk about the different ways in which information can be shown.	I talk about the different ways I use technology to collect information, including a	I can talk about the different ways data can be organised.	<p>I can organise data in different ways.</p> <p>I can collect data and</p>	I can use a spreadsheet and database to collect and record data.	I can plan the process needed to investigate the world around me.	I can recognise the difference between data text and formulae in a computer model and organise these

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	<p>I can use technology to collect information, including photos, video and sound.</p> <p>I can sort different kinds of information and present it to others.</p> <p>I can add information to a pictograph and talk to you about what I have found out.</p>	<p>camera, microscope or sound recorder.</p> <p>I can make and save a chart or graph using the data I collect.</p> <p>I can talk about the data that is shown in my chart or graph.</p> <p>I am starting to understand a branching database.</p> <p>I can tell you what kind of information I could use to help me investigate a question.</p>	<p>I can collect data to help me answer a question.</p> <p>I can use a data logger to monitor changes and can talk about the information collected.</p>	<p>identify where it could be inaccurate.</p> <p>I can choose the best way to present data to my friends.</p> <p>I can use a data logger to record and share my readings with my friends.</p>	<p>I can choose an appropriate tool to help me collect data..</p> <p>I can present data in an appropriate way.</p> <p>I can search a database using different operators to refine my search.</p> <p>I can talk about mistakes in data and suggest how it could be checked.</p>	<p>I can select the most effective tool to collect data for my investigation.</p> <p>I can check the data I collect for accuracy and plausibility.</p> <p>I can interpret the data I collect.</p> <p>I can present the data I collect in an appropriate way.</p> <p>I use the skills I have developed to interrogate a database.</p>	<p>so that the model is fit for purpose.</p> <p>I can use a model to predict and outcome</p> <p>I can explain how rules govern a model. (absolute formatting)</p> <p>I can produce a report from the information and check the</p>
Multimedia	<p>I can be creative with different technology tools.</p> <p>I can use technology to create and present my ideas.</p> <p>I can use the keyboard or a</p>	<p>I can use technology to organise and present my ideas in different ways.</p> <p>I can use the keyboard on my device to add, delete and space</p>	<p>I can create different effects with different technology tools.</p> <p>I can combine a mixture of text, graphics and sound to share my ideas and learning.</p>	<p>I can use photos, video and sound to create an atmosphere when presenting to different audiences.</p> <p>I am confident to explore new media to extend</p>	<p>I can use text, photo, sound and video editing tools to refine my work.</p> <p>I can use the skills I have already developed to create content using unfamiliar technology.</p>	<p>I can talk about audience, atmosphere and structure when planning a particular outcome.</p> <p>I can confidently identify the potential of</p>	N/A

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	<p>word bank on my device to enter text.</p> <p>I can save information in a special place and retrieve it again.</p>	<p>text for others to read.</p> <p>I can tell you about an online tool that will help me to share my ideas with other people.</p> <p>I can save and open files on the device I use.</p>	<p>I can use appropriate keyboard commands to amend text on my device, including making use of a spellchecker.</p> <p>I can evaluate my work and improve its effectiveness.</p> <p>I can use an appropriate tool to share my work online.</p>	<p>what I can achieve.</p> <p>I can change the appearance of text to increase its effectiveness.</p> <p>I can create, modify and present documents for a particular purpose.</p> <p>I can use a keyboard confidently and make use of a spellchecker to write and review my work.</p> <p>I can use an appropriate tool to share my work and collaborate online.</p> <p>I can give constructive feedback to my friends to help them improve their work and</p>	<p>I can select, use and combine the appropriate technology tools to create effects that will have an impact on others.</p> <p>I can select an appropriate online or offline tool to create and share ideas.</p> <p>I can review and improve my own work and support others to improve their work.</p>	<p>unfamiliar technology to increase my creativity.</p> <p>I can combine a range of media, recognising the contribution of each to achieve a particular outcome.</p> <p>I can tell you why I select a particular online tool for a specific purpose.</p> <p>I can be digitally discerning when evaluating the effectiveness of my own work and the work of others.</p>	

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				refine my own work.			
Technology in our lives	<p>I can recognise the ways we use technology in our classroom.</p> <p>I can recognise ways that technology is used in my home and community.</p> <p>I can use links to websites to find information.</p> <p>I can begin to identify some of the benefits of using technology.</p>	<p>I can tell you why I use technology in the classroom.</p> <p>I can tell you why I use technology in my home and community.</p> <p>I am starting to understand that other people have created the information I use.</p> <p>I can identify benefits of using technology including finding information, creating and communicating.</p> <p>I can talk about the differences between the Internet and things in the physical world.</p>	<p>I can save and retrieve work on the Internet, the school network or my own device.</p> <p>I can talk about the parts of a computer.</p> <p>I can tell you ways to communicate with others online.</p> <p>I can describe the World Wide Web as the part of the Internet that contains websites.</p> <p>I can use search tools to find and use an appropriate website.</p> <p>I think about whether I can use images that I find online in my own work.</p>	<p>I can tell you whether a resource I am using is on the Internet, the school network or my own device.</p> <p>I can identify key words to use when searching safely on the World Wide Web.</p> <p>I think about the reliability of information</p> <p>I read on the World Wide Web.</p> <p>I can tell you how to check who owns photos, text and clipart.</p> <p>I can create a hyperlink to a resource on the World Wide Web.</p> <p>I can recognise that websites use</p>	<p>I can describe different parts of the Internet.</p> <p>I can use different online communication tools for different purposes.</p> <p>I can use a search engine to find appropriate information and check its reliability.</p> <p>I can recognise and evaluate different types of information I find on the World Wide Web.</p> <p>I can describe the different parts of a webpage.</p> <p>I can find out who the information on a webpage belongs to</p>	<p>I can tell you the Internet services I need to use for different purposes.</p> <p>I can describe how information is transported on the Internet.</p> <p>I can select an appropriate tool to communicate and collaborate online.</p> <p>I can talk about the way search results are selected and ranked.</p> <p>I can check the reliability of a website.</p> <p>I can tell you about copyright and acknowledge the sources of information that I find online.</p>	<p>I can identify the individual role of the key hardware elements of standard network architecture. –</p> <p>I can understand the role of binary code.</p> <p>I Understand how numbers can be represented in binary</p> <p>I can begin to use binary code to achieve a goal.</p> <p>Compare the bit patterns used in a range of scenarios</p>

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				different methods to advertise products	<p>I know which resources on the Internet I can download and use.</p> <p>I can describe the ways in which websites advertise their products to me</p>	<p>I know that websites can use my data to make money and target their advertising</p>	