



The Wider Curriculum at St Alban's

Computing: Progression of skills

Intent: *Our wider curriculum enables each child to be a curious, enthusiastic and confident learner for life and an active and caring member of our school family and wider society.*



	Online Safety	Programming	Handling Data	Multimedia	Technology in our Lives
Reception	<ul style="list-style-type: none">• I can ask an adult when I want to use the Internet.• I can tell an adult when something worrying or unexpected happens while I am using the Internet.• I can be kind to my friends.• I can talk about the amount of time I spend using a computer / tablet / game device.• I am careful with technology devices.	<ul style="list-style-type: none">• I can make a floor robot move.• I can use simple software to make something happen.• I can make choices about the buttons and icons I press, touch or click on.	<ul style="list-style-type: none">• I can tell you about different kinds of information such as pictures, video, text and sound.	<ul style="list-style-type: none">• I can move objects on a screen.• I can create shapes and text on a screen.• I can use technology to show my learning.	<ul style="list-style-type: none">• I can tell you about technology that is used at home and in school.• I can operate simple equipment.• I can use a safe part of the Internet to play and learn.

	Online Safety	Programming	Handling Data	Multimedia	Technology in our Lives
Year 1	<ul style="list-style-type: none"> • I can keep my password private. • I can tell you what personal information is. • I can tell an adult when I see something unexpected or worrying online. • I can talk about why it's important to be kind and polite. • I can recognise an age appropriate website. • I can agree and follow sensible e-Safety rules. 	<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 what actions I will need to do 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 	<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 sort different kinds of information and present it to others. • I can add information to a pictograph and talk to you about what I have found out. 	<ul style="list-style-type: none"> • I can be creative with different technology tools. • I can use technology to create and present my ideas. • I can use the keyboard or a word bank on my device to enter text. • I can save information in a special place and retrieve it again. 	<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.

		<p>software/apps to create movement and patterns on a screen.</p> <ul style="list-style-type: none"> I can use the word debug when I correct mistakes when I program. 			
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Year 2	<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 go online for a short amount of time. I can talk about why it is important to be kind and polite 	<ul style="list-style-type: none"> 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 program a robot or software to do a particular task. 	<ul style="list-style-type: none"> I talk about the different ways I use technology to collect information, including a camera, microscope 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 	<ul style="list-style-type: none"> I can use technology to organise and present my ideas in different ways. I can use the keyboard on my device to add, delete and space text for others to read. I can tell you about an online tool that will help me to share my ideas with other people. I can save and open files on the 	<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

	<p>online and in real life.</p> <ul style="list-style-type: none"> • I know that not everyone is who they say they are on the Internet. 	<ul style="list-style-type: none"> • 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. 	<p>branching database.</p> <ul style="list-style-type: none"> • I can tell you what kind of information I could use to help me investigate a question. 	<p>device I use.</p>	<p>including finding information, creating and communicating .</p> <ul style="list-style-type: none"> • I can talk about the differences between the Internet and things in the physical world.
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Year 3	<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 	<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 	<ul style="list-style-type: none"> • I can talk about the different ways data can be organised. • I can search a ready-made database to answer questions. • I can collect data help me answer a question. • I can add to a database. 	<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. • I can use appropriate keyboard 	<ul style="list-style-type: none"> • I can save and retrieve work on the Internet, the school network or my own device. • I can talk about the parts of a computer. • I can tell ways to communicate with others

	<p>of websites as well as reporting concerns to an adult.</p> <ul style="list-style-type: none"> • I can recognise websites and games appropriate for my age. • I can make good choices about how long I spend online. • I ask an adult before downloading files and games from the Internet. • I can post positive comments online. 	<p>need to debug it.</p> <ul style="list-style-type: none"> • 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 make a branching database. • I can use a data logger to monitor changes and can talk about the information collected. 	<p>commands to amend text on my device, including making use of spellchecker.</p> <ul style="list-style-type: none"> • I can evaluate my work and improve its effectiveness. • I can use an appropriate tool to share my work online. 	<p>online.</p> <ul style="list-style-type: none"> • I can describe the World Wide Web as the part of the Internet that contains websites. • I can use 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.
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Year 4	<ul style="list-style-type: none"> • I choose a secure password and an appropriate 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 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. 	<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 can use a sensor to detect a change which can select an action within my program. • I know that I need to keep testing my program while I am putting it together. • I can use a variety of tools to create a program. 	<ul style="list-style-type: none"> • I can organise data in different ways. • I can collect data and identify where it could be inaccurate. • I can plan, create and search a database 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 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 change the appearance of text to increase its effectiveness. • I can create, modify and present documents for a particular purpose. • I can use a keyboard confidently and make use of a spellchecker to write and review my work. • I can use an appropriate tool to share my work and 	<ul style="list-style-type: none"> • I can tell you whether a resource I am using is on the Internet, the school network or my own device. • 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. • I can recognise that websites use different methods to advertise

	<ul style="list-style-type: none"> • I choose websites, apps and games that are 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. • I comment positively and respectfully online and through text messages. 	<ul style="list-style-type: none"> • 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 such as Maths, Science and Design and Technology. 		<p>collaborate online.</p> <ul style="list-style-type: none"> • I can give constructive feedback to my friends to help them improve their work and refine my own work. 	<p>products.</p>
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Year 5	<ul style="list-style-type: none"> • I can choose a secure password and screen name. • I protect my password and other personal information. • 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. • 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 	<ul style="list-style-type: none"> • 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 use a variable to increase programming possibilities. • 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 	<ul style="list-style-type: none"> • I can use a spreadsheet and database to collect and record data. • I can choose an appropriate tool to help me collect data. • I can present data in an appropriate way. • I can search a database using different operators to refine my search. • I can talk about mistakes in data and 	<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 describe different parts of the Internet. • I can use different online communication tools for different purposes. • I can use a 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 describe the different parts of a webpage. • I can find out who the information on a webpage belong to. • I know which resources on the

	<p>playing a game.</p> <ul style="list-style-type: none">• 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.	<p>physical system.</p> <ul style="list-style-type: none">• I can use logical reasoning to detect and debug mistakes in a program.• I use logical thinking, imagination and creativity to extend a program.	<p>suggest how it could be checked.</p>		<p>Internet I can download and use.</p> <ul style="list-style-type: none">• I can describe the ways in which websites advertise their products to me.
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Year 6	<ul style="list-style-type: none"> • I protect my password and other personal information. • I can explain the consequences of sharing too much about myself online. • I support my friends to protect themselves and make good choices online, including reporting concerns to an adult. • I can explain the consequenc 	<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 the programming of that algorithm. • 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 	<ul style="list-style-type: none"> • I can plan the process needed to investigate the world around me. • 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 interpret the data I collect. • I can present the data I collect in an appropriate way. • I use the skills I have developed to interrogate a database. 	<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 combine a range of media, recognising the contribution of each 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 	<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 check the reliability of a website. • I can tell you about copyright and acknowledge the sources of information that I find online. • I know that websites can use my data to make

	<p>es of spending too much time online or on a game.</p> <ul style="list-style-type: none">• 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.	<p>action and predict what will happen.</p> <ul style="list-style-type: none">• I can use logical reasoning to detect and correct errors in a algorithms and programs.		<p>evaluating the effectiveness of my own work and the work of others.</p>	<p>money and target their advertising.</p>
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