

Aldersbrook Primary School - Progression in Computing Skills

Strand	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Technology in our Lives	<p>Understanding the World</p> <p>ELG: Past and Present</p> <p>Talk about the lives of the people around them and their roles in society;</p>	<p>Understanding the World</p> <p>ELG: Past and Present</p> <p>Talk about the lives of the people around them and their roles in society;</p>	<p>I can identify different types of technology</p> <p>I can identify a computer and its main parts</p> <p>I can use a mouse in different ways</p> <p>I can use a keyboard to type on a computer</p> <p>I can use a keyboard to edit text</p> <p>I can create rules for using technology responsibly</p>	<p>I can recognise the uses and features of technology</p> <p>I can identify the uses of technology in the school</p> <p>I can identify technology beyond school</p> <p>I can explain how technology helps us</p> <p>I can explain how to use technology safely</p> <p>I can recognise that choices are made when using technology</p>	<p>I can explain how digital devices function</p> <p>I can identify input and output devices</p> <p>I can recognise how digital devices can change the way that we work</p> <p>I can explain how a computer network can be used to share information</p> <p>I can explore how digital devices can be connected</p> <p>I can recognise the physical components of a network</p>	<p>I can describe how networks physically connect to other networks</p> <p>I can recognise how networked devices make up the internet</p> <p>I can outline how websites can be shared via the World Wide Web (WWW)</p> <p>I can describe how content can be added and accessed on the World Wide Web (WWW)</p> <p>I can recognise how the content of the WWW is created by people</p> <p>I can evaluate the consequences of unreliable content</p>	<p>I can explain that computers can be connected together to form systems</p> <p>I can recognise the role of computer systems in our lives</p> <p>I can recognise how information is transferred over the internet</p> <p>I can explain how sharing information online lets people in different places work together</p> <p>I can contribute to a shared project online</p> <p>I can evaluate different ways of working together online</p>	<p>I can identify how to use a search engine</p> <p>I can describe how search engines select results</p> <p>I can explain how search results are ranked</p> <p>I can recognise why the order of results is important, and to whom</p> <p>I can recognise how we communicate using technology</p> <p>I can evaluate different methods of online communication</p>
Multimedia A	<p>Physical Development</p> <p>ELG: Fine Motor Skills</p> <p>- Use a range of small tools, including scissors, paint brushes and cutlery;</p> <p>Expressive Arts and Design</p> <p>ELG: Creating with Materials</p> <p>- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function;</p>	<p>Physical Development</p> <p>ELG: Fine Motor Skills</p> <p>- Use a range of small tools, including scissors, paint brushes and cutlery;</p> <p>Expressive Arts and Design</p> <p>ELG: Creating with Materials</p> <p>- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function;</p>	<p>I can describe what different freehand tools do</p> <p>I can use the shape tool and the line tools</p> <p>I can make careful choices when painting a digital picture</p> <p>I can explain why I chose the tools I used</p> <p>I can use a computer on my own to paint a picture</p> <p>I can compare painting a picture on a computer and on paper</p>	<p>I can use a digital device to take a photograph</p> <p>I can make choices when taking a photograph</p> <p>I can describe what makes a good photograph</p> <p>I can decide how photographs can be improved</p> <p>I can use tools to change an image</p> <p>I can recognise that photos can be changed</p>	<p>I can explain that animation is a sequence of drawings or photographs</p> <p>I can relate animated movement with a sequence of images</p> <p>I can plan an animation</p> <p>I can identify the need to work consistently and carefully</p> <p>I can review and improve an animation</p> <p>I can evaluate the impact of adding other media to an animation</p>	<p>I can identify that sound can be digitally recorded:</p> <p>I can use a digital device to record sound:</p> <p>I can explain that a digital recording is stored as a file:</p> <p>I can explain that audio can be changed through editing:</p> <p>I can show that different types of audio can be combined and played together:</p> <p>I can evaluate editing choices made:</p>	<p>I can identify that drawing tools can be used to produce different outcomes</p> <p>I can create a vector drawing by combining shapes</p> <p>I can use tools to achieve a desired effect</p> <p>I can recognise that vector drawings consist of layers</p> <p>I can group objects to make them easier to work with</p> <p>I can evaluate my vector drawing</p>	<p>I can use a computer to create and manipulate three-dimensional (3D) digital objects</p> <p>I can compare working digitally with 2D and 3D graphics</p> <p>I can construct a digital 3D model of a physical object</p> <p>I can identify that physical objects can be broken down into a collection of 3D shapes</p> <p>I can design a digital model by combining 3D objects</p> <p>I can develop and improve a digital 3D model</p>

Multimedia B	<p>Physical Development</p> <p>ELG: Fine Motor Skills</p> <p>Use a range of small tools, including scissors, paint brushes and cutlery;</p> <p>Expressive Arts and Design</p> <p>ELG: Creating with Materials</p> <p>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function;</p>	<p>Physical Development</p> <p>ELG: Fine Motor Skills</p> <p>Use a range of small tools, including scissors, paint brushes and cutlery;</p> <p>Expressive Arts and Design</p> <p>ELG: Creating with Materials</p> <p>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function;</p>	<p>I can use a computer to write</p> <p>I can add and remove text on a computer</p> <p>I can identify that the look of text can be changed on a computer</p> <p>I can make careful choices when changing text</p> <p>I can explain why I used the tools that I chose</p> <p>I can compare typing on a computer to writing on paper</p>	<p>I can say how music can make us feel</p> <p>I can identify that there are patterns in music</p> <p>I can describe how music can be used in different ways</p> <p>I can show how music is made from a series of notes</p> <p>I can create music for a purpose</p> <p>I can review and refine our computer work</p>	<p>I can recognise how text and images convey information</p> <p>I can recognise that text and layout can be edited</p> <p>I can choose appropriate page settings</p> <p>I can add content to a desktop publishing publication</p> <p>I can consider how different layouts can suit different purposes</p> <p>I can consider the benefits of desktop publishing</p>	<p>I can explain that digital images can be changed</p> <p>I can change the composition of an image</p> <p>I can describe how images can be changed for different uses</p> <p>I can make good choices when selecting different tools</p> <p>I can recognise that not all images are real</p> <p>I can evaluate how changes can improve an image</p>	<p>I can explain what makes a video effective</p> <p>I can use a digital device to record video</p> <p>I can capture video using a range of techniques</p> <p>I can create a storyboard</p> <p>I can identify that video can be improved through reshooting and editing</p> <p>I can consider the impact of the choices made when making and sharing a video</p>	<p>I can review an existing website and consider its structure</p> <p>I can plan the features of a web page</p> <p>I can recognise the need to preview pages</p> <p>I can outline the need for a navigation path</p> <p>I can consider the ownership and use of images (copyright)</p> <p>I can recognise the implications of linking to content owned by other people</p>
	Handling Data	<p>Mathematics</p> <p>ELG: Numerical Patterns</p> <p>Verbally count beyond 20, recognising the pattern of the counting system;</p> <p>Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity;</p> <p>Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.</p>	<p>Mathematics</p> <p>ELG: Numerical Patterns</p> <p>Verbally count beyond 20, recognising the pattern of the counting system;</p> <p>Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity;</p> <p>Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.</p>	<p>I can label objects</p> <p>I can identify that objects can be counted</p> <p>I can describe objects in different ways</p> <p>I can count objects with the same properties</p> <p>I can compare groups of objects</p> <p>I can answer questions about groups of objects</p>	<p>I can recognise that we can count and compare objects using tally charts</p> <p>I can recognise that objects can be represented as pictures</p> <p>I can create a pictogram</p> <p>I can select objects by attribute and make comparisons</p> <p>I can recognise that people can be described by attributes</p> <p>I can explain that we can present information using a computer</p>	<p>I can create questions with yes/no answers</p> <p>I can identify the object attributes needed to collect relevant data</p> <p>I can create a branching database</p> <p>I can explain why it is helpful for a database to be well structured</p> <p>I can identify objects using a branching database</p> <p>I can compare the information shown in a pictogram with a branching database</p>	<p>I can explain that data gathered over time can be used to answer questions</p> <p>I can use a digital device to collect data automatically</p> <p>I can explain that a data logger collects 'data points' from sensors over time</p> <p>I can use data collected over a long duration to find information</p> <p>I can identify the data needed to answer questions</p> <p>I can use collected data to answer questions</p>	<p>I can use a form to record information</p> <p>I can compare paper and computer-based databases</p> <p>I can outline how grouping and then sorting data allows us to answer questions</p> <p>I can explain that tools can be used to select specific data</p> <p>I can explain that computer programs can be used to compare data visually</p> <p>I can apply my knowledge of a database to ask and answer real-world questions</p>

Programming A	<p>Expressive Arts and Design</p> <p>ELG: Being Imaginative and Expressive</p> <p>Invent, adapt and recount narratives and stories with peers and their teacher;</p>	<p>Expressive Arts and Design</p> <p>ELG: Being Imaginative and Expressive</p> <p>Invent, adapt and recount narratives and stories with peers and their teacher;</p>	<p>I can explain what a given command will do</p> <p>I can act out a given word</p> <p>I can combine forwards and backwards commands to make a sequence</p> <p>I can combine four direction commands to make sequences</p> <p>I can plan a simple program</p> <p>I can find more than one solution to a problem</p>	<p>I can describe a series of instructions as a sequence</p> <p>I can explain what happens when we change the order of instructions</p> <p>I can use logical reasoning to predict the outcome of a program (series of commands)</p> <p>I can explain that programming projects can have code and artwork</p> <p>I can design an algorithm</p> <p>I can create and debug a program that I have written</p>	<p>I can explore a new programming environment</p> <p>I can identify that commands have an outcome</p> <p>I can explain that a program has a start</p> <p>I can recognise that a sequence of commands can have an order</p> <p>I can change the appearance of my project</p> <p>I can create a project from a task description</p>	<p>I can identify that accuracy in programming is important</p> <p>I can create a program in a text-based language</p> <p>I can explain what 'repeat' means</p> <p>I can modify a count-controlled loop to produce a given outcome</p> <p>I can decompose a task into small steps</p> <p>I can create a program that uses count-controlled loops to produce a given outcome</p>	<p>I can control a simple circuit connected to a computer</p> <p>I can write a program that includes count-controlled loops</p> <p>I can explain that a loop can stop when a condition is met</p> <p>I can explain that a loop can be used to repeatedly check whether a condition has been met</p> <p>I can design a physical project that includes selection</p> <p>I can create a program that controls a physical computing project</p>	<p>I can define a 'variable' as something that is changeable</p> <p>I can explain why a variable is used in a program</p> <p>I can choose how to improve a game by using variables</p> <p>I can design a project that builds on a given example</p> <p>I can use my design to create a project</p> <p>I can evaluate my project</p>
Programming B	<p>Expressive Arts and Design</p> <p>ELG: Being Imaginative and Expressive</p> <p>Invent, adapt and recount narratives and stories with peers and their teacher;</p>	<p>Expressive Arts and Design</p> <p>ELG: Being Imaginative and Expressive</p> <p>Invent, adapt and recount narratives and stories with peers and their teacher;</p>	<p>I can choose a command for a given purpose</p> <p>I can show that a series of commands can be joined together</p> <p>I can identify the effect of changing a value</p> <p>I can explain that each sprite has its own instructions</p> <p>I can design the parts of a project</p> <p>I can use my algorithm to create a program</p>	<p>I can explain that a sequence of commands has a start</p> <p>I can explain that a sequence of commands has an outcome</p> <p>I can create a program using a given design</p> <p>I can change a given design</p> <p>I can create a program using my own design</p> <p>To decide how my project can be improved</p>	<p>I can explain how a sprite moves in an existing project</p> <p>I can create a program to move a sprite in four directions</p> <p>I can adapt a program to a new context</p> <p>I can develop my program by adding features</p> <p>I can identify and fix bugs in a program</p> <p>I can design and create a maze-based challenge</p>	<p>I can develop the use of count-controlled loops in a different programming environment</p> <p>I can explain that in programming there are infinite loops and count-controlled loops</p> <p>I can develop a design that includes two or more loops which run at the same time</p> <p>I can modify an infinite loop in a given program</p> <p>I can design a project that includes repetition</p> <p>I can create a project that includes repetition</p>	<p>I can explain how selection is used in computer programs</p> <p>I can relate that a conditional statement connects a condition to an outcome</p> <p>I can explain how selection directs the flow of a program</p> <p>I can design a program which uses selection</p> <p>I can create a program which uses selection</p> <p>I can evaluate my program</p>	<p>I can create a program to run on a controllable device</p> <p>I can explain that selection can control the flow of a program</p> <p>I can update a variable with a user input</p> <p>I can use an conditional statement to compare a variable to a value</p> <p>I can design a project that uses inputs and outputs on a controllable device</p> <p>I can develop a program to use inputs and outputs on a controllable device</p>

<p>Personal, Social and Emotional Development</p> <p>ELG: Self-Regulation, Managing Self, Building Relationships,</p>	<p>Personal, Social and Emotional Development</p> <p>ELG: Self-Regulation, Managing Self, Building Relationships,</p>	<p>I can talk about why it's important to be kind and polite.</p> <p>I can tell an adult when I see something unexpected or worrying online.</p> <p>I can recognise an age appropriate website.</p> <p>I can tell you what personal information is.</p>	<p>I can talk about why it is important to be kind and polite online and in real life.</p> <p>I can describe the things that happen online that I must tell an adult about.</p> <p>I know that not everyone is who they say they are on the Internet.</p> <p>I can explain why I need to keep my password and personal information private.</p> <p>I can talk about why I should go online for a short amount of time.</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 a 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 long I spend online.</p> <p>I can ask an adult before downloading files and games from the Internet.</p>	<p>I can choose a secure password when I am using a website</p> <p>I can use the safety features of websites as well as reporting concerns to an adult.</p> <p>I know that anything I post online can be seen by others.</p> <p>I can comment positively and respectfully online.</p> <p>I can help my friends make good choices about the time they spend online.</p> <p>I can talk about why I need to ask a trusted adult before downloading files and from the Internet.</p>	<p>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. I can talk about the dangers of spending too long online or playing a game.</p> <p>I know which resources on the Internet I can download and use.</p> <p>I can discuss the importance of choosing an age appropriate website or game.</p> <p>I can explain why I need to protect my computer or device from harm</p>	<p>I protect my password and other personal information.</p> <p>I can explain the consequences of sharing too much information 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 explain the consequences to myself and others of not communicating kindly and respectfully.</p> <p>I protect my computer or device from harm on the Internet</p>
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