

St Anne's C of E Primary School Curriculum Plan

Subject: Computing

Year: 1

Term: Autumn



Unit: Technology around us



Vocabulary	Knowledge	Understanding	Skills
	Children will know (that)	Children will understand (that)	Children will be able to
<p>Technology – Something that is made by people to help us. It does not have to be electronic or digital.</p> <p>Device – a piece of mechanical or electronic piece of equipment made or used for specific purpose.</p> <p>Computer – A device for working with information. This can be letters, words, numbers or images.</p> <p>Mouse – A hand held device separate to the computer with 2 buttons on. It controls the cursor on the screen.</p> <p>Trackpad – A flat pad on laptops that you slide your finger over to move a cursor.</p> <p>Keyboard – A series of buttons or keys with letters and symbols on.</p>	<p>Computing systems technology can help us in our everyday life.</p> <p>what is and what is not technology within a familiar environment (home/school).</p> <p>the main features of a computer / laptop.</p> <p>There are rules that we all need to follow when we are using technology and that these keep us safe.</p>	<p>Computing systems what a computer is and how its constituent parts function together as a whole.</p> <p>how technology helps us in everyday life.</p> <p>what each feature of a computer/laptop does.</p> <p>that although mice look different on a laptop and desktop, they perform the same task.</p> <p>the keyboard is used to write on a computer.</p> <p>that the save icon will save their work so they can see it again next time they use the laptop / computer.</p>	<p>Effective use of tools switch a computer / laptop on and off correctly.</p> <p>click and drag to move objects on a screen with purpose.</p> <p>write their name using the keyboard.</p> <p>leave spaces between words using a keyboard.</p> <p>delete something they have typed using the keyboard.</p> <p>save their work to a file and re open it.</p>

<p>Screen – The surface (usually flat) on which the image appears on an electronic display.</p> <p>Double-click – To select a function or item on a computer screen by pressing one of the mouse buttons twice quickly</p> <p>Typing – the process of using a keyboard to write words, letters or numbers on a screen.</p> <p>Trusted adult – an adult that you have a good relationship with an who can help keep you safe, help you and protect you.</p>		<p>that the save icon is the same on many programs</p>	
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St Anne's C of E Primary School Curriculum Plan

Subject: Computing

Year: 1

Term: Spring



Unit: Creating Media - Digital Painting



Vocabulary	Knowledge	Understanding	Skills
	Children will know (that)....	Children will understand (that)	Children will be able to
<p>Paint program – A program on a computer that allows you to draw or select shapes of different colours and sizes to create a picture.</p> <p>Tool – A specific icon in a program that allows you to perform a specific task.</p> <p>Paintbrush – A computer drawing tool.</p> <p>Fill – When a shape on screen is filled in with a specific colour.</p> <p>Undo – Take away or delete your last action.</p> <p>Free hand tools – Tools that are controlled with the mouse or touch pad. This allows free lines and shapes to be drawn as if you were</p>	<p>Creating media computers can be used to make art.</p> <p>the names of some of the tools that can be used to make art on a computer.</p> <p>their work can be saved, opened and worked upon again.</p> <p>different effects can be incorporated into a picture created on a computer.</p> <p>key features of a picture created on a computer and pictures that are not.</p> <p>.</p>	<p>Design and development – activities involved in planning, creating and evaluating computing artefacts.</p> <p>what each free hand tool can do.</p> <p>that free tools can be adjusted to suit need.</p> <p>when it is appropriate to use each tool.</p> <p>Differences when painting using a computer and painting using brushes.</p>	<p>Creating Media select and create a range of media using text and images.</p> <p>make marks and draw on a screen.</p> <p>select and use an appropriate colour when drawing on a screen.</p> <p>Effective use of tools select and use an appropriate thickness of paintbrush when drawing on a screen.</p> <p>select and use the shape tool effectively when drawing on a screen.</p> <p>fill a shape drawn with an appropriate colour.</p> <p>use the undo button to correct a mistake.</p>

<p>drawing with a pen, pencil or paint brush.</p> <p>Shape tools – A tool that allows you to draw set shapes accurately. The size of these can be changed.</p> <p>Line tool- A tool that allows you to draw a straight line of any length or thickness.</p>			<p>to save, file and open work to continue working on one piece.</p> <p>explore technology through trial and error, discussing, learning and demonstrating as they tinker.</p>
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St Anne's C of E Primary School Curriculum Plan

Subject: Computing

Year: 1

Term: Summer



Unit: Programing – Moving a Robot



Vocabulary	Knowledge	Understanding	Skills
	Children will know (that).....	Children will understand (that).....	Children will be able to.....
<p>Pattern – a regular or logical form, order, or arrangement of parts.</p> <p>Algorithm –a sequence of instructions or a set of rules to get something done.</p> <p>Debug – Debugging is the process of finding and fixing errors in an algorithm</p> <p>Logical reasoning –helps us explain why something happens.</p> <p>Repetition – the recurrence of actions or events.</p> <p>Decomposition - the process of breaking down a task into smaller, more-manageable parts.</p>	<p>Programming</p> <p>an algorithm is a set of instructions with an intended outcome</p> <p>to solve a problem, breaking it down and applying logic will help.</p> <p>repetition is the recurrence of actions or events and can be used in an algorithm.</p> <p>a set of instructions is an algorithm and they know that changing the order of these instructions can change what happens.</p> <p>each button on the bee-bot control panel does. (forward, backwards, turn left, turn right, go, clear, pause)</p>	<p>Programming</p> <p>that an algorithm needs to be clear and precise or the outcome will not be what is intended.</p> <p>they need to test a solution and that if it goes wrong they can adapt and try and fix it.</p> <p>using repetition can save time, simplify an algorithm and help to avoid mistakes.</p> <p>the order of a set of instructions is important if they want something specific to happen.</p> <p>that tinkering with new technology is a good way of discovering what is possible and how something works.</p>	<p>Programming</p> <p>write an algorithm, test it and then debug if the outcome is wrong.</p> <p>use logical reasoning to solve a problem.</p> <p>to spot, within an algorithm, where and when repetition can be used</p> <p>to create an algorithm for a person to follow.</p> <p>to explore technology through trial and error, discussing, learning and demonstrating as they tinker.</p> <p>to look at a problem, discuss possible solutions and test them by programming the Bee-Bots using the control buttons.</p>

<p>Tinkering – Learning and making sense of something by using, playing and experimenting with it.</p> <p>Programming – the process of writing computer programs</p> <p>Collaborating - work with others on an activity or project</p>	<p>some technology can be programmed to complete a task/act in a certain way/create a specific output</p> <p>they can clear a program and start again.</p> <p>if the bee-bot does not do what they wanted it to do, the algorithm will need debugging.</p>	<p>that the Bee-Bot will only do what they program it to do</p> <p>that the Bee-Bot will follow the sequence of buttons pressed in order and that if something goes wrong, it is because the algorithm is wrong.</p>	<p>Persevere when they encounter bugs and work through how to fix them.</p>
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