

St Anne's C of E Primary School Curriculum Plan

Subject: Computing

Year: 3

Term: Autumn



Unit: Creating Media – Digital Animation



Vocabulary	Knowledge	Understanding	Skills
	Children will know (that).....	Children will understand (that).....	Children will be able to.....
<p>Animation – the process of giving the impression drawings or objects are moving as part of a video/film.</p> <p>Story Board – a visual plan to structure stories or animations using a sequence of single pictures.</p> <p>Stop Frame Animation - a filming technique where pictures are taken as objects are moved in small increments</p> <p>Frame – a single picture or image that makes up a moving video.</p> <p>Increments – a series of regular additions</p> <p>Sequence – an ordered set of something, in this case images or pictures.</p>	<p>There are ways that you can make a picture move.</p> <p>Animations are made up of a sequence of pictures.</p> <p>That pictures can be drawn in a sequence to plan the animation and that these pictures are called a story board.</p> <p>The term 'onion skinning' and how it is used to make objects appear to move in animations.</p> <p>Key elements of an animation that help to improve it and how to change them.</p>	<p>How little changes to pictures in a sequence make the pictures appear to move.</p> <p>The main elements of an effective flip book.</p> <p>Consistency is important when drawing pictures for an animation.</p> <p>The background needs to stay the same, whilst small changes to the object that is moving, are made.</p> <p>That some elements of a picture needs to be kept the same and some elements need to change when creating</p> <p>How onion skinning can be used to create smooth movements within animations.</p>	<p>draw a sequence of pictures and create an effective flip book—style animation</p> <p>explain how an animation/flip book works</p> <p>produce a story board to communicate and plan their animation.</p> <p>To explain how onion skinning can help an animator create smooth movement within the animation.</p> <p>Evaluate their own and other people's animations, suggesting changes that can be made to make them better.</p> <p>Make changes to their animations to improve them further.</p>

<p>Flip-book – a series of pictures that are in a set sequence, bound together and then flipped quickly to give the impression of a moving image.</p> <p>Predict – make a good guess on an outcome based on some knowledge.</p> <p>Consistency - similarity between or among different things.</p> <p>Onion skinning – a way of seeing several animation frames at once when drawing each from to make sure the movement produced in the animation is smooth.</p>			
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St Anne's C of E Primary School Curriculum Plan

Subject: Computing

Year: 3

Term: Spring



Unit: Computer Systems and Networks – Connecting Computers



Vocabulary	Knowledge	Understanding	Skills
	Children will know (that).....	Children will understand (that).....	Children will be able to.....
<p>user devices – a device that someone uses directly (laptop, tablet, printer etc)</p> <p>input – putting information into a device</p> <p>output – what the digital device does with the processed information – action.</p> <p>process – what the digital device does with the information inputted into it.</p> <p>program – a set of instructions telling the device what to do.</p> <p>connection – links or joins between things.</p>	<p>Digital devices accept inputs and can give examples of these</p> <p>Digital devices produce outputs and can give examples of these</p> <p>A digital device will carry out a process with the information inputted into it and it usually leads to an output / action.</p> <p>Information flows or passes through connections.</p> <p>A network connects things to each other.</p> <p>A network is more effective if there is a network switch that distributes data.</p> <p>A server can be used to save information on a network.</p>	<p>That in input is something that goes into the digital device</p> <p>The processes is what the device does with the information inputted into it following a program.</p> <p>The output is what comes out of the device</p> <p>That a network switch helps to pass information around a network of connected devices.</p> <p>That a server can create a backup which helps to protect information from being lost or deleted if a network was to fail or an individual device was to break or be lost.</p> <p>The difference between a wired device and a wireless device on a network.</p>	<p>Identify and describe the input, process, output model using a familiar example.</p> <p>Explain how to use digital devices for different activities.</p> <p>Describe differences between digital devices and non-digital devices.</p> <p>Describe an example of a non digital and a digital network.</p> <p>Gove an example of a network that is familiar to them.</p> <p>Demonstrate how information is passed through multiple connections.</p>

<p>network - a number of connections linking things with each other</p> <p>network switch – a device that enables multiple devices on a network to be connected</p> <p>Network Cable – A wire used to connect devices to a network.</p> <p>Network socket – a socket allowing network cables to be connected to the network.</p> <p>Server - an important computer that stores files and manages the network.</p> <p>Backup – when a file or digital information is saved on a server making it more secure than saving to an individual device.</p> <p>Wireless Access point- a device connected to a wired network via a wire, and that it sends and receives wireless signals for/from devices with wireless connectivity.</p> <p>Wireless connection – the way a device connects to the Wireless Access Point without the need for a wire. This allows information to be passed on a network.</p>	<p>That devices on a network can be connected without the need for wires and that this is called a wireless connection.</p> <p>The role of a network cable and network socket on a device.</p>	<p>The benefits of a wireless network.</p> <p>That devices need to connect to a wireless access point to be able to connect to a network.</p> <p>That some devices may need to be connected to a network using a network cable and socket.</p>	<p>Describe why a network switch is needed on a network to make it more efficient.</p> <p>Identify a network cable and network socket.</p> <p>Describe why storing information on a server makes the information more secure.</p> <p>Describe the role of a wireless access point</p>
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St Anne's C of E Primary School Curriculum Plan

Subject: Computing

Year: 3

Term: Summer



Unit: Programming – Early Coding.



Vocabulary	Knowledge	Understanding	Skills
	Children will know (that).....	Children will understand (that).....	Children will be able to.....
<p>Blocks palette: on screen blocks that have an instruction in each of them. They can be moved and joined together to form a simple program or set of instructions.</p> <p>Code area: This is where blocks are placed to create a program.</p> <p>Sprite – The icon or character on the screen that you are programming to move and carry out actions.</p> <p>Stage: - The background that the sprite appears in on screen</p> <p>Commands – The instructions inputted into the program to make the Sprite move and operate.</p> <p>Sequence – a pattern or process in which one thing follows another.</p> <p>Event –something that happens.</p> <p>Task – action or role to perform</p> <p>Design – plan something showing different stages.</p> <p>Code – another name given to the</p>	<p>Commands have an outcome.</p> <p>At sequence is the process where one thing follows on from another.</p> <p>the importance of order in sequences to real-world examples</p> <p>That a program or sequence has a starting point.</p> <p>Pragmas and sequences do not always run as you would expect them to and sometimes you need to work out which part did not work. This is called de bugging.</p> <p>The term modify, means to change or adjust something in a design or program.</p>	<p>The sprite on screen is controlled by the commands chosen within a sequence or program.</p> <p>That the commands are carried out in a set order.</p> <p>The order in which the commands are actions is called a sequence.</p> <p>You can look at code sequences and work out how a sprite might move before running a code.</p> <p>Exploring sections of code (snippets) might help you work out where there are problems with a code.</p> <p>De bugging can help to fix problems within code and sequences.</p>	<p>describe the three main areas of the Scratch environment.</p> <p>effectively join blocks to create sequences of code.</p> <p>add and delete blocks to effect the sequence of code.</p> <p>transition from sprites to the stage and add new backdrops</p> <p>Can give examples of difference sequences.</p> <p>Plan the movement of a sprite on screen.</p> <p>Can describe 5 steps to effectively debugging a program.</p> <p>Evaluate the way in which the sprite moved compared to their</p>

<p>instructions or commands that are to be performed in a sequence.</p> <p>Code Snippet – a small section within a longer code.</p> <p>Run the code – to start a program or code sequence so that each command occurs in the order set out.</p> <p>Algorithm – An exact list of commands / operations that are one in order.</p> <p>Bug – a fault In the code program or algorithm that effects the way the program or sequence works.</p> <p>De bug – finding where the problems in a code sequence are and correcting them.</p>		<p>When trying to de bug a program it is useful to follow 5 key steps.</p> <ul style="list-style-type: none"> - Review the task – what should the project do? - Test the project - Identify the bug by looking at the part of the code where it did not work as expected. - Fix the bug, by changing or modifying some commands. - Test the bug fix – does the code now do what it should? 	<p>plan and talk about what they notice.</p> <p>to match a piece of code to an outcome</p> <p>to modify a program using a design</p> <p>make choices about a design and justify them.</p>
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