

St Anne's C of E Primary School Curriculum Plan

Subject: Computing

Year: 4

Term: Autumn



Unit: Creating Media – Picture Editing



Vocabulary	Knowledge	Understanding	Skills
	Children will know (that).....	Children will understand (that).....	Children will be able to.....
<p>Image – a picture</p> <p>Composition – the way something is put together or arranged.</p> <p>Edit – to alter or change something</p> <p>Copyright – permission to use something that you find online that someone else has created.</p> <p>Rotate - turn</p> <p>Flip – turn over</p> <p>Superimpose – when an image is put on top of an existing one.</p> <p>Crop – change the size, specifically to make smaller or to get rid of parts you do not want.</p>	<p>That you can find images on the internet</p> <p>Images can be changed and that this is called editing.</p> <p>That you should only download images that are copyright free and that this means you have permission to use them.</p> <p>How to save an image as a file and name a file correctly so that it can be re-opened.</p> <p>That there is a difference in the ways that you can save a file so that you can keep an original version of your work and a new version with edits.</p> <p>The term 're-touch' and how this can be used in editing images.</p>	<p>Images can be changed to create a particular effect.</p> <p>What may be changed in an image.</p> <p>Why someone might want to change an image.</p> <p>Some of the effects that people may want to create when they edit images.</p> <p>Using 'save as' instead of 'save' allows you to select a new and appropriate name for an edited file / image.</p> <p>How re touching can be used and some of the positive and negative impacts of this as an editing tool.</p> <p>How fake images may be produced and why.</p>	<p>Identify changes that can be made to an image and describe the effect that these changes can produce.</p> <p>change the composition of an image by selecting parts of it</p> <p>reflect on the tools used, choices made, and how effective they were.</p> <p>demonstrate their understanding of the different tools used by verbalising their functions.</p> <p>Identify if an image has been re-touched and why this may have happened.</p> <p>Select appropriate tools to re touch an image.</p>

<p>Re touch – a way to edit an image that is aimed at improving it.</p> <p>Fake – Not real</p> <p>Pixels – small dots of colour that make up an image.</p> <p>JPEG – a type of file that is specifically for images.</p> <p>Duplicates - copies</p>	<p>That not all images that they see are real, some images are fake.</p>	<p>Some key elements of an image that might be faked.</p>	<p>Make reasonable judgements about why an image may be real or fake and justify these.</p> <p>Make informed and reasoned choices about edits they have made to an image and the impact this has had on its audience.</p>
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St Anne's C of E Primary School Curriculum Plan

Subject: Computing

Year: 4

Term: Spring



Unit: Computing systems and networks – The Internet



Vocabulary	Knowledge	Understanding	Skills
	Children will know (that).....	Children will understand (that).....	Children will be able to.....
<p>Internet A global computer network providing a variety of information and communication facilities. This information passes through routers.</p> <p>Network - More than one device connected together.</p> <p>Router A router directs or 'routes' messages around the internet.</p> <p>Network Security – tools put in place that protects information being shared on a network and the devices that send and receive it.</p> <p>World Wide Web is only part of the internet also referred to as www</p> <p>Website – A collection of information and files that can be</p>	<p>That information moves around a network.</p> <p>That a router directs information round a network in the most efficient way.</p> <p>Different information that can be shared on the World Wide Web.</p> <p>That websites are on servers all over the world and the internet connects them through routers.</p> <p>A device needs a web browser to search the world wide web on the internet.</p> <p>A web browser is used to search for websites.</p> <p>What www stands for.</p>	<p>Why a network needs protecting.</p> <p>Ways in which the internet allows us to see things on the World Wide Web.</p> <p>That the Internet and the World Wide Web are not the same thing</p> <p>The three parts of a web address, www, the organisation, what type of organisation.</p> <p>From a website address you may be able to know what type of information might be on that website.</p> <p>That there are different types of web browsers.</p> <p>Websites often have common features. These help us find things</p>	<p>Explain that the Internet is made up of lots of networks joined together. A network or networks.</p> <p>Demonstrate how information is shared across the internet.</p> <p>To discuss the types of information that might be found on different websites by looking at their website addresses. Give reasons for their answers.</p> <p>Name several different web browsers.</p> <p>Can describe some of the advantages and disadvantages of the world wide web.</p> <p>Can describe and identify the main features of a website.</p>

<p>seen on the world wide web. This has been created by someone and the information is related to one subject or theme.</p> <p>Web Page - one document or a single part of a website.</p> <p>Web Address – the words, letters and symbols that are typed into a search engine to find a specific website. Each website address is unique.</p> <p>Domain name – the main part of a web address that is unique to that website.</p> <p>Browser lets you search for different websites through the internet.</p> <p>Ownership – when something belongs to someone.</p> <p>Content – documents, images, video and music found on websites on the world wide web.</p>	<p>The World Wide Web is part of the Internet and that it contains websites and web pages.</p> <p>That a web address is broken down into 3 parts to help you identify where it has come from.</p> <p>That the Internet and the World Wide Web are not the same thing,</p> <p>There is different content on the world wide web. Some of it you can use and change and some of it you cant.</p> <p>That information on the world wide web can be shared incredibly quickly.</p>	<p>on the website and link to other websites.</p> <p>Some of the advantages and disadvantages of the world wide web.</p> <p>Content on the world wide web belongs to someone and they decide what people can do with the content they have produced.</p> <p>That not all information on the world wide web is accurate or true.</p>	<p>To explain how some content on the world wide web can be downloaded and used and some cant. Can give examples of this.</p> <p>Explain why we need to be careful before we share our own and other peoples information and content online.</p> <p>Explain how search results on a web browser may be influenced and appear in a certain order.</p> <p>Can explain how to consider the following when looking for information online –</p> <ul style="list-style-type: none"> - If the information is accurate. - If the information is true - If the information has been influenced by adverts - If you are allowed to use or share the information.
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St Anne's C of E Primary School Curriculum Plan

Subject: Computing

Year: 4

Term: Summer Term



Unit: Programming - Programming on screen



Vocabulary	Knowledge	Understanding	Skills
	Children will know (that).....	Children will understand (that).....	Children will be able to.....
<p>Program- a set of instructions followed carefully and in order to instruct a device to do something.</p> <p>Commands – a set of accurate instructions.</p> <p>Code Snippet –A small part of a set of instructions or code within a program.</p> <p>Repetition – to do something over and over again.</p> <p>Algorithm – A set of accurate instructions that must be followed in order. How a program performs a task.</p>	<p>That programming a computer device requires you to use a language that the device understands.</p> <p>There are various different shapes around us that can be reproduced using a repeating pattern.</p> <p>That if you decompose a task you are breaking it down into smaller parts.</p> <p>A procedure is a named code snippet that can be run multiple times.</p> <p>That creating a procedure saves time when typing code.</p> <p>To repeat something means to carry it out again in the same way.</p>	<p>That commands need to be written and communicated in a way that the device understands.</p> <p>That repetitions can be used to draw a shape and that repetitions can be repeated many times.</p> <p>A count controlled loop is a set of commands that are repeated for a set amount of times.</p> <p>Why it is useful to decompose a task.</p> <p>How using a procedure when typing code, can save time by directing the device to repeat an action multiple times.</p> <p>That each procedure needs its own name so it can be identified clearly when typing code.</p>	<p>program a computer by typing commands</p> <p>explain the effect of changing a value of a command</p> <p>create a code snippet for a given purpose</p> <p>use a template to draw what they want their program to do</p> <p>write an algorithm to produce a given outcome</p> <p>test an algorithm in a text-based language</p> <p>recognise patterns in a sequence</p>

<p>Count controlled loop Actions a group of commands in the same order repeatedly for a set number of times.</p> <p>Predict – Make an accurate guess about something based on some knowledge.</p> <p>De bug – To find errors in a sequence or program with the aim of fixing them.</p> <p>Decomposition- breaking things own into small parts.</p> <p>Procedure – a named code snippet that can be run multiple times.</p>	<p>It is important to design a program first by planning it, before starting to use typed code.</p> <p>The starting point and end point are important when designing typed code.</p>	<p>That is it important to consider how many times a command or set of commands must be repeated in count controlled loop commands.</p>	<p>use a count controlled loop to produce a given outcome.</p> <p>Modify a count controlled loop to change a given outcome.</p> <p>Can make predictions about what will happen with designing using a count controlled loop.</p>
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