

Computing Progression Map

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Yr 1	E-safety rules	<p>Communication</p> <p>Practice mouse control</p> <p>Introduce important symbols on Microsoft software e.g. open, save, print</p> <p>Create a word document and input text into it, print it and save it with a clear name</p> <p>Retrieve the word document by opening it and make edits, save and print it again</p>	<p>Programming – Introduce algorithms (Spring 1)</p> <p>Understand that an algorithm is a list of instructions</p> <p>Write their own algorithms</p> <p>Test and debug their algorithms</p>	Programming – Beebots	Communication and text	<p>Text and graphics</p> <p>Create a Paint document, change the background and draw on it.</p> <p>Retrieve Paint document and edit and improve their picture.</p> <p>Use Microsoft word to write words, alter size, colour and font type.</p> <p>Retrieve edit and improve.</p> <p>Save and print.</p>
Yr 2	<p>E-safety</p> <p>Review e-safety rules: Differences between real and online experiences.</p> <p>Introduce sharing information online; emails, communicating and navigating safely.</p> <p>Keeping personal information safe.</p> <p>Importance of talking to a trusted adult about their online experiences.</p>	<p>Online research and communication</p> <p>Practice mouse control</p> <p>Practice keyboard use</p> <p>Use child-safe search engines for a purpose</p>	<p>Programming – Beebots</p> <p>Children to explore using Beebots and remind themselves of what they do</p> <p>Children set up obstacle courses to navigate a beebot through</p> <p>Write down the algorithm given to the beebot using keywords forward, backwards, turn quarter-right, turn quarter-left</p>	<p>Programming – Scratch</p> <p>Scratch activity cards and tutorials</p> <p>Navigate the Scratch programming environment.</p> <p>Create a background and sprite for a game. Add inputs to control their sprite.</p>	<p>Digital imagery/Graphics</p> <p>Practice mouse control</p> <p>Practice keyboard use</p> <p>Use safe search engines to find pictures and copy and paste them into a word document. Save it</p> <p>Edit pictures by changing their size (including by cropping), colour etc.</p> <p>Add captions/labels to the pictures</p>	<p>Text and graphics</p> <p>Create a PowerPoint presentation with different backgrounds and fonts. Save it.</p> <p>Add captioned pictures.</p> <p>Retrieve presentation and edit and add a new slide each week.</p>

<p>Yr 3</p>	<p>E-safety Review e-safety rules Check knowledge by completing quizzes</p>	<p>Communication and collaboration Touch typing practice Create and edit a 'published' book to share as a class</p>	<p>Programming Scratch Animation Scratch activity cards and tutorials Navigate the Scratch programming environment. Create a background and sprite for a game. Add inputs to control their sprite. Create an animation with changing slides and a sprite that moves. Use speech bubbles to add information</p>	<p>Programming KODU Create a 3D digital world for a game with land, water and scenery. Add a sprite to their world. Program their sprite to navigate their 3D world with an input. Create paths on which sprites will move.</p>	<p>Presentations and word processing Create a poster using Microsoft Word with different forms/sources of media e.g. own photographs, photographs from internet (copyright free), fonts, colours etc. Organise and refine the poster to suit purpose and audience: Format text to indicate relative importance Justify text where appropriate (not over-using)</p>	<p>Digital imagery/photography Use digital cameras/iPads independently to photograph content Review content considering purpose and quality of images e.g. blurs, angles, obstructions Upload and save photos into a folder on the computer Edit pictures e.g. make black and white, change colours Sequence photographs using Windows Move Maker to create a slide show Add background music</p>
<p>Yr 4</p>	<p>E-safety Review e-safety rules Create a resource to help young children remember the e-safety rules e.g. poster, chatterbox, video etc.</p>	<p>Communication and collaboration Touch typing practice: Use Microsoft Word to create and edit a high-quality piece of English work to turn into a 'published' book to share as a class</p>	<p>Programming Scratch Animation (Spring 1): Scratch activity cards and tutorials Navigate the Scratch programming environment. Create a background and sprite for a game. Add inputs to control their sprite. Use conditional statements (if... then)</p>	<p>Programming Turtle Academy Instruct turtle to create pictures using simple shapes</p>	<p>Presentations and word processing Create a presentation using different forms/sources of media e.g. own photographs, photographs from internet (copyright free), sounds, videos etc. Organise and refine the presentation to suit purpose and audience: Format text to indicate relative importance Justify text where appropriate (not over-using) Cut, copy and paste between applications (using keyboard shortcuts) Use spell check</p>	<p>Digital imagery, sound and movement Storyboard the narrative for a short stop-motion animation and identify different scenes/clips Using iPads/cameras, photograph content and upload and save content into a folder on the computer Use Lego Movie Maker or Windows Movie Maker to combine videos in the correct order Record voices using microphones to narrate the story Add background sound/titles</p>

<p>Yr 5</p>	<p>E-safety Review e-safety rules: chatting with care, using text and picture messaging (including personal pictures), behaving responsibly Use the Internet to research their work and recognise the need to ask appropriate questions to find appropriate answers Practice interpreting information from online research, rather than copying Carry out more refined web searches by using key words Identify the validity of a website by discussing inaccurate or biased sources Develop strategies to ignore or cancel unsolicited advertising (pop-ups, banners, videos or audio) Acknowledge sources used in their work</p>	<p>Blogging Alter the theme and appearance of their blog, adding background images etc. Create a new post, save it as a draft and publish it Embed photos, hyperlinks and videos into posts. Reorganise posts and remove posts they no longer want Like/follow other blogs and build up their blog content over the year</p>	<p>Programming Scratch Animation Scratch activity cards and tutorials Create a simple game where if a conditional statement is met then they start again or lose e.g. don't touch the edge of a maze. Evaluate the effectiveness of their game and debug if required Focus on appearance of game to make it appealing for the target audience</p>	<p>Programming on Khan Academy Follow the course of study under Computer programming – Drawing and animation</p>	<p>Spreadsheets Using a simple layout demonstrated by the teacher, create a simple spreadsheet model and use it to solve problems Change variables in a spreadsheet to solve problems Make predictions and changes and check results. Enter formulae for the four operations (+-x/) into a spreadsheet Use 'SUM' to calculate the total of a set of numbers in a range of cells Change data in a spreadsheet to answer 'what if...?' questions and check predictions</p>	<p>Digital imagery/video Storyboard the narrative for a short film and identify different scenes/clips Using iPads/cameras, film content and upload and save them into a folder on the computer Use Windows Movie Maker to combine videos in the correct order Add background sound/titles</p>
<p>Yr 6</p>	<p>E-safety Review e-safety rules Hamilton Trust resources: https://www.hamilton-trust.org.uk/topics/upper-key-stage-2-topics/e-safety-mini-to-pic/e-safety-and-digital-citizenship/ Use a range of sources to check the validity of a website. Recognise that different viewpoints can be found on the web and critically evaluate the information</p>	<p>Emailing and blogging Using class emails: Contact class teacher/classmates via email Understand the importance of using the correct email address and having a subject to the email Discuss and create emails for different audiences and purposes Continue blogging from previous year</p>	<p>Programming Scratch Animation Create a game for younger pupils to identify prime numbers or vowels or square numbers and keep a score. Understand the use of variables in a programming context. Evaluate the effectiveness of their game and debug if required</p>	<p>Programming on Khan Academy Follow the course of study under Computer programming – Making websites</p>	<p>Spreadsheets Create a table on a spreadsheet using different formulae including finding totals and differences Use data collected in Maths/Science to create a spreadsheet and present the information in charts/graphs Identify the different uses for different presentations of data Create a business plan for money making project:</p>	<p>Year book Create a collaborative student-made year book using Microsoft Word building on word processing skills developed last year</p>

	<p>they use, and understand some of the potential dangers of not doing so</p> <p>Discuss the issues of plagiarism, copyright and data protection in relation to their work</p> <p>Discuss copyright free images and sounds from sources such as the Audio Networks and NEN image gallery</p>		<p>Focus on appearance of game to make it appealing for the target audience</p>		<p>Recognise the variables in a model and explore the effects of changing them e.g. if ticket price is reduced, would profit go up or down?</p>	
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