

Eastcote Primary Academy Computing Progression Map

Children can...

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>Algorithms, programs and coding</p> <p>Beebot</p> <p>ALEX</p> <p>Scratch Jr</p> <p>Scratch</p> <p>Lego We Do</p>	<p>RC cars, wind up cars/robots.</p> <p>Physical Beebot Robot</p> <p>Input simple commands.</p>	<p>Beebot App and ALEX App</p> <p>Understand what an algorithm is and follow one themselves.</p> <p>Create a simple set of instructions orally.</p> <p>Put at least two instructions together to control and navigate the Beebot or ALEX avatar.</p>	<p>Scratch Jr</p> <p>Predict the outcomes of a set of three instructions.</p> <p>Use the grid on Scratch jr to move a sprite from x to y.</p> <p>Test a set of two or three instructions.</p> <p>Lego Sort to Recycle Project.</p> <p>Connect the Lego build hub to the iPad app.</p> <p>Copy simple code to move their build.</p>	<p>Scratch Jr/ALEX</p> <p>Predict the outcomes of a set of four or five instructions.</p> <p>Use right angle turns.</p> <p>Use the repeat one command.</p> <p>Test and debug a set of instructions.</p> <p>Write simple code and test it.</p> <p>Connect two backgrounds together.</p>	<p>Scratch Penalty Shootout/Disc o Diva</p> <p>Use blocks of code with variables to create a set of specific instructions.</p> <p>Lego Prevent Flooding Project</p> <p>Use repeat instructions to loop a block of code.</p> <p>Experiment with speed, sensors and sound.</p> <p>Make accurate predictions.</p>	<p>Lego Moon Base (open)</p> <p>Space Exploration Project (Open)</p> <p>Explain what an algorithm is and create their own.</p> <p>Use input from sensors and sounds to trigger events .</p> <p>Write programs that have sequences and repetitions.</p> <p>Check, debug and refine code.</p> <p>Create a program for a specific purpose, for example a game or a Lego model.</p>	<p>Scratch</p> <p>Use blocks of code with number variables to create a set of specific instructions.</p> <p>Use code to programme sprites to interact.</p> <p>Create their own interactive game background for a purpose.</p> <p>Use the x and y axis to identify where a sprite would start and its location.</p> <p>Understand that sprites have costumes to indicate movement or action.</p>

Multimedia Animation & Presentation: Popplet iMovie Book Creator I Can Animate Google Slides	iPad Taking photos Basic skills of caring for technology	Popplet Add a Popplet bubble. Change the colour of a Popplet. Add an image from the camera roll into a bubble. Add one word text to the bubble. Create a Popplet for a purpose.	Book Creator Add text and change the font size and colour. Change the page colour. Add images and resize from the camera roll or internet. Create a short ebook with a purpose. iMovie Create a short trailer which highlights the main events in a recount. Save appropriate images from the internet and add them to their trailer. Add short text/captions which give information about the chosen images.	Popplet Add images to a spider diagram Popplet from the camera roll or internet. Add text and labels. Create a visually pleasing Popplet that is colour coded and in the correct size proportion. Create a Popplet with a clear purpose. Link appropriate bubbles together. Google Slides Create a short presentation that includes... Text and font, sized and coloured appropriately. Images from the internet, sized	Book Creator Add text, images, drawings and sound into an ebook. Create a visually pleasing ebook that is sized and spaced appropriately with a clear purpose. iMovie Create a short trailer which includes images, video and sound. Add appropriate text in full sentences. Choose the appropriate image for the storyboard template. Google Slides - revisit	Popplet Create a detailed and visually pleasing Popplet with a clear purpose. Include images, text and drawing. Organise information correctly such as a timeline or the order of something. Stop motion Create a storyboard. Create a real life setting/background for an animation. Capture images to form a stop-motion animation up to one minute long using Lego characters.	Book Creator Add text, images, drawings, sound and video into an ebook. Make sensible choices about how to present their books. Create a visually pleasing ebook for a clear purpose. iMovie Create a short movie. Film their own content and embed this in the movie. Include a wide array of media such as text, sound, video, images, drawings, photographs and green screen. Google Slides Revise Y3 and
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				appropriately.			embed video.
Data Collecting data Retrieving data Representing data 2 Simple - 2 Calculate Google Sheets Google Forms Data loggers Branching databases	Collecting data (N: animal / plant hunts & recording practically, R: pictogram to show traffic data)	Collect data from others. Create a pictogram using 2 Simple - 2 Calculate. Choose appropriate emojis for pictograms.	Collect data from others and record as a tally. Create a bar chart using 2 Simple - 2 Calculate. Add text to label the chart title and axis. Use the fill tool to complete the bars.	Google sheets-Identify the following on a spreadsheet: cell, row, column. Move and select a specific cell, eg, C6. (Treasure hunt task) Enter text, numbers or data into a prepared table on google sheet with support. Convert data table into a bar chart. Add a title and label the axis. Interpret this data. Branching databases	Create a table on Google sheets. Add a border and title. Change alignment of text positioning and colour. Sort the data in ascending, descending alphabetical order. Create a bar chart from this data and insert the chart onto the sheet. Label the chart's axis and give it a title. Ask and answer questions about this data. Data loggers	Input data onto a Google sheet. Change, colour, size, font, alignment, borders independently. Choose the best way to order the data. Use the sum formula to add up a column. Add a filter and use this to display data. Create a suitable chart/graph and analyse it correctly.	Google forms-revisit (charity) Understand the different types of questions and answers available on a Google Form. Formulate appropriate questions using Google Forms to collect data. Collect data using Google Forms and use this to create graphs and pie charts. Sensing movement

<p>Technology in our lives</p> <p>Communicating</p> <p>Email</p> <p>Instant message</p> <p>Video call</p> <p>Changes through the years</p> <p>Iconic people</p> <p>The internet</p> <p>Computer networks</p>	<p>Understand that devices allow us to communicate when we are not together (model use of Showbie, text messages, emails, GoogleMeet assemblies)</p> <p>Mimic using technology in the role play area (laptop in school roleplay, scanner / till / telephone in shop)</p>	<p>Understand what an email is and when it may be used in real life.</p> <p>Recognise an email address.</p> <p>Contribute to sending a whole class email.</p>	<p>Send and reply to a 1:1 instant message through gmail chat.</p> <p>Use the internet for research.</p> <p>Explain the difference between hardware and software.</p>	<p>Send and reply to an email between class peers.</p> <p>Explain how technology has changed and advanced within their lifetime.</p> <p>Iconic People: women in IT - Ada Lovelace, Hedy Lamar, Annie Easley, Radia Perlman, Elizabeth Feinler</p>	<p>Send an email to a trusted person.</p> <p>Video call a class peer using Google meet.</p> <p>Use the internet for research and note taking.</p> <p>Iconic people: Alan Turing - code breaking</p>	<p>Send an email to a trusted person and include an attachment-document or image.</p> <p>Find out how communication has advanced through the years.</p> <p>Understand how computers communicate with one another.</p>	<p>Communicate in a variety of digital ways.</p> <p>Choose the most appropriate way to communicate.</p> <p>Iconic people: Mark Zuckerberg - Facebook trial (5 billion fine)</p>
<p>Online safety</p> <p>Digital citizenship</p> <p>Digital literacy</p> <p>Online behaviour</p> <p>Well-being</p>	<p>Asking a grown up if they can go online/use a device.</p> <p>Letting a grown up know about any changes to chosen apps / sites / games</p>	<p>Explain what they use the internet for.</p> <p>Understand that the internet can be dangerous.</p> <p>Is aware of the SMART acronym and knows to always tell a grown up if something upsets them.</p> <p>Make their google searches safe by always</p>	<p>Know to play games that are appropriate for their age.</p> <p>Knows that online friends are strangers and never to meet them alone.</p> <p>Know what cyber-bullying is and that it is wrong.</p> <p>Can identify dangers when given certain scenarios.</p>	<p>Explain that the internet and gaming can be addictive.</p> <p>Understand how time limits on devices can help prevent addiction from developing.</p> <p>Explain that devices can have a negative impact on our well-being and ways to take care of ourselves.</p>	<p>Understand that not everything on the internet is true.</p> <p>Question the validity of what they see on the internet.</p> <p>Understand what copyright and plagiarism is.</p> <p>Understand how to behave appropriately in communicating.</p> <p>Recognise</p>	<p>Know that the internet can create online communities and this can be a positive thing.</p> <p>Know how to be an ally to others.</p> <p>Know what to do if they witness any kind of discrimination online.</p> <p>Know the ways to report any kind of discrimination</p>	<p>Understand that social media is not real life.</p> <p>Understand how filters and comparison can have negative impacts on our well-being, self-esteem and body image.</p> <p>Knows how to behave appropriately online and the consequences of online behaviour.</p>

		entering 'kids' or 'KS1' with their search.			online conflict and how to deal with it appropriately.	online.	Know the importance of real life friendships.
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