



Dallam Community Primary School – Subject Progression – Computing

		Computing Progression							
		EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
Computing Systems and Networks		<p>Seedlings</p> <ul style="list-style-type: none"> Turn an iPad on and off. Use cause and effect toys such as push and pull to make objects move. Engage with videos, songs and clips on digital devices such as iPads and interactive whiteboards. <p>Acorns</p> <ul style="list-style-type: none"> Navigate to a chosen app on an iPad. Play an age appropriate interactive game on an iPad. Play an age appropriate interactive game on the interactive whiteboard. Press stop and go buttons on interactive toys such as Bee Bots and remote controlled cars. 	<ul style="list-style-type: none"> Log into a computer and access a website. Develop basic mouse skills. Use mouse skills to draw and manipulate shapes. Use a range of skills to create a desired effect. Understand how to layer shapes to create an image. 	<ul style="list-style-type: none"> To recognise parts of a computer To recognise how technology is controlled To create and design for an invention To understand the role of computers Know how to use touch type Understand how to use word processor Understand how to add images to a text. 	<ul style="list-style-type: none"> To understand the meaning of the words network, device and wireless. Understand how files are shared on different devices. Understand what a router does. Learn how data can be corrupt or lost. Write and send an email To add attachments to emails I can recognise unkind behaviour online I can recognise junk, spam and phishing emails. I can use positive language whilst online. To recognise inputs and outputs. To develop an understanding of various parts of a computer. 	<ul style="list-style-type: none"> Learn how to use basic features of google Documents Share Google documents with others Create a presentation using google slides. Learn how to create, share surveys and questionnaires on google forms. 	<ul style="list-style-type: none"> Search websites efficiently. Know how to check information for accuracy. Develop online research skills. Create an informative poster using online software. Explore the role of web crawlers and a web index. 	<ul style="list-style-type: none"> Identify how the first computer cracked the Enigma code. Research and present information about important historical figures in computing. 	
	Programming		<p>Ash</p> <ul style="list-style-type: none"> Turn the volume on an iPad up or down. Take a photograph with the camera app on an iPad. Play an age appropriate interactive game on an iPad. Play an age appropriate interactive game on the interactive whiteboard. Select the tools that they would like to use from the menu on these games, for example, different colours or shapes on drawing games. Press directional buttons on interactive toys such as Bee Bots and remote controlled cars to control their direction. Turn on a CD player and play a CD. Skip a track or stop a track. 	<ul style="list-style-type: none"> To understand what an algorithm is. To follow instructions to carry out an action Applying computing concepts to a real world situation. To recognise that digital content can be represented in many forms. Design and build a rocket. Set a sequence of instructions. To explore a new device. To understand that computers use inputs and outputs. Explain what decomposition is. Debug a simple algorithm. To create a demonstration video Plan and follow a set of instructions. To create and programme a device 	<ul style="list-style-type: none"> To decompose a game To understand that computers use algorithms to make predictions. Plan algorithms to solve problems To understand what abstraction and debugging is. Follow an algorithm Plan and use code to create an algorithm 	<ul style="list-style-type: none"> To create a sprite. Use loops to create repetition. To alter a programmes code. To add speech to your animation To programme a game. 	<ul style="list-style-type: none"> Use scratch features, tools and decomposition skills to understand scripts. To make variables and understand their role. 	<ul style="list-style-type: none"> Tinker with Sonic Pi and explore its capabilities. Create a piece of music using programming skills. Compose music soundtrack using online software. Introduce repeating loops into soundtrack. Adapt musical code whilst performing. Identify what Random Access Memory is. Use binary to carry out calculations. Use binary to create messages. Use basic features of BBC micro: bit. Use BBC micro: bit to create a polling programme. Turn BBC micro: bit into a pedometer. 	<ul style="list-style-type: none"> Explore capabilities and commands of the text based programme Logo. Explore the use of nested loops. Alter a picture using text based programme language Python. Use loops in programme to create Islamic art. Choose and design an electronic product. Code the programme efficiently using sequencing, selection, variables, inputs and outputs. Create a website for their product. Create a video advertisement for your product.
		Creating Media		<ul style="list-style-type: none"> To understand and create a sequence of pictures. To take clear photos and edit them. Create a photo collage To search for and import images. 	<ul style="list-style-type: none"> Create an animation To understand what an animation is. To create and plan an animation To understand the role of sensors. To create a digital drawing 	<ul style="list-style-type: none"> Create a storyboard. Use digital devices to take photos and videos. Use film editing software to record and add sounds to videos and images. Share ideas about my work and the work of others. 	<ul style="list-style-type: none"> Use various features within Google Slides. Plan, design and create my webpage using Google Sites Understand how HTML defines how a website is displayed. Edit HTML to design and edit my own posters. Understand fake stories and create them by hacking the code of a website Replace the texts and images of a webpage. 	<ul style="list-style-type: none"> Explore original forms of animation and create one. Create own stop motion animation. Decompose animation using a storyboard. Edit and evaluate animations using a range of features taught. Identify ad create a pixel. Design a tyre using online 3D software. Learn how images can be compressed. 	<ul style="list-style-type: none"> Create and edit radio play. Learn about how computer designs have changed overtime. Design a computer for the future.



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Data Handling	<ul style="list-style-type: none"> To add data to a table or spreadsheet. Collect, record and sort data. Use technology to represent data in different ways. 	<ul style="list-style-type: none"> To interpret data 	<ul style="list-style-type: none"> Understand how to use databases. To sort and filter data by different values. Represent data in the form of graphs or charts. 	<ul style="list-style-type: none"> Understand the four elements of computational thinking. Apply knowledge of decomposition to a real world task. Create a game in Scratch. Use computational thinking to solve a range of challenges. 	<ul style="list-style-type: none"> Understand that information has to travel in order to be sent and received. Translate data into binary code. 	<ul style="list-style-type: none"> Identify how barcodes and QR codes work. Identify how infrared waves transmit data. Explore the uses of Radio Frequency Identification. Evaluate and analyse mobile data. Learn how to transfer data safely. Investigate the data usage of online activity. Identify how data analysis can improve city life. Design a system for a smart school. Present ideas of how we can turn our school into a SMART school.
Online Safety	<ul style="list-style-type: none"> To know what the internet is and how to use it safely. To understand different feelings when using the internet. To understand how to treat others, both online and in person. To understand the importance of being careful about what we share and post online. 	<ul style="list-style-type: none"> To know what happens to the information that I post online. I know who to talk to if something has been posted online without my consent. I can explain some rules for keeping personal information private. I know that I need to speak with an adult before sharing things online. Use strategies taught to decide if something online is true or not To understand I have a right to say no to things that make me uncomfortable online. 	<ul style="list-style-type: none"> Identify the difference between facts, opinions and beliefs Know ways of dealing with upsetting content online. Know how to keep our personal information safe on social media platforms. 	<ul style="list-style-type: none"> Look at the methods used to encourage people to buy online. Understand that what we see or read online is not always true. Understand that technology can be designed to impersonate or act as a living thing and how this can be dangerous. To know the positive and negative effects whilst being online. To know how to be respectful online. 	<ul style="list-style-type: none"> Learn how to alter app permissions. Understand how to respectful online. To know the differences between online and offline bullying. Learn how online technology can affect our mental health. 	<ul style="list-style-type: none"> Understand what Brute Force Hacking is and how to keep passwords safe and secure. Explore a range of ways to tackle negative feelings that come from being online. Look at the consequences of sharing things online. Know how to create a positive online reputation Know that we can report online bullying and that evidence of this should be captured. Identify potential online scams.