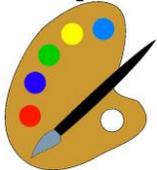
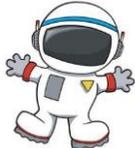
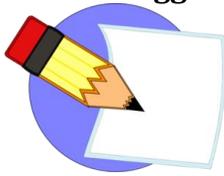




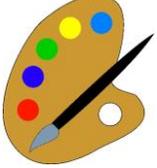
Ark Franklin Primary Academy ICT Curriculum



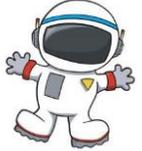
ICT Overview

	Autumn Term		Spring Term		Summer Term	
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	We are Treasure Hunters 		We are TV Chefs 		We are painters 	
Year 2		We are game testers 		We are photographers 		We are astronauts 
Year 3	We are programmers 		We are bug fixers 		We are presenters 	
Year 4		We are toy designers 		We are musicians 		We are co-authors 
Year 5	We are web developers 		We are bloggers 		We are game developers 	
Year 6		We are app planners 		We are project managers 		We are interface designers 

Year 1

	Autumn Term		Spring Term		Summer Term	
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Overview	<p>We are Treasure Hunters</p> 		<p>We are TV Chefs</p> 		<p>We are painters</p> 	
Suggested Content	<p><i>Pupils will program a toy to move around a map to find buried treasure. They will think of algorithms for their routes and input these as store programs for the robot.</i></p> <p><i>Hunt for treasure</i></p> <p><i>Record an algorithm</i></p> <p><i>Experiment with a robot</i></p> <p><i>Program a robot</i></p> <p><i>Program a robot to find treasure</i></p> <p><i>Debug a program</i></p>		<p><i>Pupils will produce short videos of themselves making a healthy meal or snack. This complex task will be broken into smaller parts.</i></p> <p><i>Watch a TV clip of a chef</i></p> <p><i>Instruct a robot chef</i></p> <p><i>Draw steps for creating a snack</i></p> <p><i>Use a video camera</i></p> <p><i>Film a TV Clip</i></p> <p><i>Edit a TV clip</i></p>		<p><i>Pupils will work creatively to examine illustrations from books that they have read to create illustrate a simple eBook.</i></p> <p><i>Look at characters from traditional tales</i></p> <p><i>Plan a picture and write keywords</i></p> <p><i>Create a picture</i></p> <p><i>Edit other children's pictures</i></p> <p><i>Create an eBook</i></p> <p><i>Look at eBooks and improve them</i></p>	
Required Resources	<p>Program(s): 2go, 2logo</p> <p>Equipment: Beebots</p>		<p>Program(s): 2Paint, Movie Maker</p> <p>Equipment: Laptops, Cameras</p>		<p>Program(s): Word, PowerPoint, 2Paint</p> <p>Equipment: Laptops</p>	

Year 2

	Autumn Term		Spring Term		Summer Term	
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Overview		<p>We are game testers</p> 		<p>We are photographers</p> 		<p>We are astronauts</p> 
Suggested Content	<p><i>Pupils will work out how simple Scratch games work. They also look at free online or open source games and share their favourite games with the class.</i></p> <p><i>Find out how the addition game works</i></p> <p><i>Find out how the fish game works</i></p> <p><i>Find out how the tennis game works</i></p> <p><i>Find out how the duck shoot game works.</i></p> <p><i>Look at complex games</i></p> <p><i>Work out the rules in each other's games</i></p>		<p><i>Pupils will review photos online, practice using a digital camera, take photos to fit a given theme, edit their photos and select their best images to include in a shared portfolio.</i></p> <p><i>Look at photos and talk about what makes a good photo</i></p> <p><i>Learn about a camera</i></p> <p><i>Take photos on a chosen theme</i></p> <p><i>Use Picasa to organize photos</i></p> <p><i>Edit photos</i></p> <p><i>Pick the best photos for a portfolio</i></p>		<p><i>Children will build on work from their work as game testers to program a sprite (such as a spaceship) to move around the screen.</i></p> <p><i>Plan instructions and try them out</i></p> <p><i>Work out how to get from the Earth to the Moon</i></p> <p><i>Work with Scratch</i></p> <p><i>Use Scratch to program a spaceship</i></p> <p><i>Write a program in Scratch and debug it</i></p> <p><i>Move a spaceship within a program</i></p>	
Required Resources	<p>Program(s): Scratch, 2Code</p> <p>Equipment: Laptops</p>		<p>Program(s): Picasa</p> <p>Equipment: Cameras</p>		<p>Program(s): 2Code, Scratch</p> <p>Equipment: Beebots</p>	

Year 3

	Autumn Term		Spring Term		Summer Term	
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Overview	<p>We are programmers</p> 		<p>We are bug fixers</p> 		<p>We are presenters</p> 	
Suggested Content	<p><i>Pupils will create an animated cartoon using characters that they design. They will use a paint tool to create characters and backgrounds. They will then create an animation by translating a storyboard into a series of scripted instructions (program) for graphic objects.</i></p> <p><i>Find out about animations</i></p> <p><i>Create a storyboard</i></p> <p><i>Create characters and a background</i></p> <p><i>Animate characters</i></p> <p><i>Add sounds to an animation</i></p> <p><i>Evaluate an animation and suggest improvements</i></p>		<p><i>Pupils will work with six example Scratch projects. They explain how the scripts work, finding and correcting errors in them and explore creative ways of improving them. They will learn to recognise common types of programming error and practise solving problems through logical thinking.</i></p> <p><i>Find and correct the bugs in the multiplication program</i></p> <p><i>Improve the circle drawing program</i></p> <p><i>Find and correct the bugs in the penguin program</i></p> <p><i>Find the bug in the 'Pong' game and attempt to correct it</i></p> <p><i>Find and correct the bugs in the division program</i></p> <p><i>Think of ways to improve a car driving program</i></p>		<p><i>Pupils will create a short narrated video of themselves practising a sport or other skill and use this to improve their performance.</i></p> <p><i>Find out how a TV programme is made</i></p> <p><i>Practise using a video camera</i></p> <p><i>Shoot video files</i></p> <p><i>Edit video files</i></p> <p><i>Respond to feedback on a video</i></p> <p><i>Evaluate a completed project and consider improvements</i></p>	
Required Resources	<p>Program(s): Scratch, 2Code</p> <p>Equipment: Laptops</p>		<p>Program(s): Scratch, 2Code</p> <p>Equipment: Laptops</p>		<p>Program(s): Moviemaker</p> <p>Equipment: Cameras, Laptops</p>	

Year 4

	Autumn Term		Spring Term		Summer Term	
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Overview		<p>We are toy designers</p> 		<p>We are musicians</p> 		<p>We are co-authors</p> 
Suggested Content	<p><i>Pupils will work together to design a simple toy that incorporates sensors and outputs. They will also create an on-screen prototype of their toy using Scratch and pitch their idea to others.</i></p> <p><i>Find out about inputs and outputs</i></p> <p><i>Plan a toy</i></p> <p><i>Design a toy in Scratch</i></p> <p><i>Program a toy simulation</i></p> <p><i>Test and improve a toy simulation</i></p> <p><i>Present a toy idea to others</i></p>		<p><i>Pupils will work together to produce and edit music for a purpose of their choice.</i></p> <p><i>Discuss types of music</i></p> <p><i>Create music with Audacity</i></p> <p><i>Record sound samples</i></p> <p><i>Use samples to create a piece of music</i></p> <p><i>Edit a composition</i></p> <p><i>Share and evaluate compositions with an audience</i></p>		<p><i>Pupils will learn about how Wikipedia is produced and collaborate to create their own 'mini Wikipedia'.</i></p> <p><i>Plan content for a wiki</i></p> <p><i>Use Wikipedia to find information</i></p> <p><i>Create a class wiki</i></p> <p><i>Edit other people's wiki pages</i></p> <p><i>Edit a Wikipedia page</i></p> <p><i>Evaluate wiki pages and discuss future improvements</i></p>	
Required Resources	<p>Program(s): Scratch</p> <p>Equipment: Laptops</p>		<p>Program(s): Audacity</p> <p>Equipment: Microphones, Laptops</p>		<p>Program(s): -</p> <p>Equipment: Laptops</p>	

Year 5

	Autumn Term		Spring Term		Summer Term	
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Overview	We are web developers 		We are bloggers 		We are game developers 	
Suggested Content	<p><i>Pupils will work collaboratively to create a website that explains e-safety to a young audience and encourages responsible online behaviour.</i></p> <p><i>Discuss ideas for creating a website</i></p> <p><i>Learn how Search Works</i></p> <p><i>Build web pages</i></p> <p><i>Add artwork, audio and video to web pages</i></p> <p><i>Review and help improve, other people's web pages</i></p> <p><i>Collect feedback and publish a site</i></p>		<p><i>Pupils will extend their sense of membership of a learning community beyond school as they create a media-rich blog, comment on blogs and respond to the comments of others.</i></p> <p><i>Find out what makes a good blog</i></p> <p><i>Write a blog post</i></p> <p><i>Comment on other people's blog posts</i></p> <p><i>Add images to a blog post</i></p> <p><i>Insert audio or video into a blog post</i></p> <p><i>Write blog posts about an event as it occurs</i></p>		<p><i>Pupils will plan their own simple computer game. They will design characters and backgrounds and create a working prototype.</i></p> <p><i>Plan a type of game</i></p> <p><i>Create backgrounds, sprites, sound effects and dialogue for a game</i></p> <p><i>Program a game</i></p> <p><i>Correct bugs in a game</i></p> <p><i>Test a game and receive feedback on it</i></p> <p><i>Write instructions to a game and publish it</i></p>	
Required Resources	Program(s): - Equipment: Laptops		Program(s): Scratch, Powerpoint Equipment: Laptops		Program(s): - Equipment: Laptops	

Year 6

	Autumn Term		Spring Term		Summer Term	
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Overview		<p>We are app planners</p> 		<p>We are project managers</p> 		<p>We are interface designers</p> 
Suggested Content	<p><i>Pupils will learn about the capabilities of smartphones and consider a problem that a smartphone or tablet app could solve before pitching this idea to others.</i></p> <p><i>Discover what smartphones can do</i></p> <p><i>Learn how to geotag and add location information to photographs</i></p> <p><i>Identify a problem to solve with an app</i></p> <p><i>Research competitors</i></p> <p><i>Create a presentation to pitch an idea</i></p> <p><i>Deliver a pitch and review progress</i></p>		<p><i>Pupils will work collaboratively to develop a smartphone or tablet app applying computational thinking to the task of managing a complex project.</i></p> <p><i>Discuss the steps involved in creating an marketing an app</i></p> <p><i>Identify and develop skills in a team</i></p> <p><i>Plan tasks and create a timeframe for completion</i></p> <p><i>Decide on resources required</i></p> <p><i>Collect and develop resources for an app</i></p> <p><i>Plan for high quality outcomes</i></p>		<p><i>Pupils will design the look and feel of their app's interface. They will sketch ideas, plan screen layouts for their app and develop these using a wire framing tool.</i></p> <p><i>Sketch ideas for an app interface</i></p> <p><i>Plan the screens for an app</i></p> <p><i>Develop an app interface</i></p> <p><i>Improve the accessibility of an app</i></p> <p><i>Source and develop backgrounds, images, sound effects and video for an app</i></p> <p><i>Record a screencast that explains how an app will work</i></p>	
Required Resources	<p>Program(s): Powerpoint, Photo Editing, Audacity</p> <p>Equipment: Laptops, Cameras</p>		<p>Program(s): -</p> <p>Equipment: Laptops</p>		<p>Program(s): Powerpoint</p> <p>Equipment: Laptops, Cameras</p>	