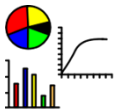
Computing Essential Skills Y1 to Y6

Charnock Hall Primary Academy
A.L.E.A.D. Academy

Aspect	EYFS	KS1		Lower KS2		Upper KS2	
	YR	Y1	Y2	Y3	Y4	Y5	Y6
Computing systems and Networks	Use an old keyboard in role play area.	Recognising technology in school and using it responsibly.	Identifying IT and how its responsible use improves our world in school and beyond.	Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks	Recognising that the internet is a network of networks including the WWW, and why we should evaluate online content.	Recognising IT systems in the world and how some can enable searching on the internet.	Exploring how data is transferred by working collaboratively online.
Creating Media	Use an ipad to take photographs and draw on an art package.	Choosing appropriate tools in a program to create art, and making comparisons with working non digitally. Using a computer to create and format text, before comparing to writing non-digitally	Capturing and changing digital photographs for different purposes. Using a computer as a tool to explore rhythms and melodies, before creating a musical composition.	Capturing and editing digital still images to produce a stop frame animation that tells a story Creating documents and modifying text, images and page layouts for a specific purpose.	Capturing and editing audio to produce a podcast, ensuring that copyright is considered. Manipulating digital images, and reflecting on the impact of the changes and whether the required purpose is fulfilled,	Planning, capturing, and editing video to produce a short film. Creating images in a drawing program by using layers and groups of objects.	Designing and creating webpages, giving consideration to copyright, aesthetics and navigation. Planning, developing, and evaluation 3D computer models of physical objects.
 **Data and Information**		Exploring object labels, then using them to sort and group objects by properties.	Collecting data in tally charts and using attributes to organise and present data on a computer.	Building and using branching databases to group objects using yes/no questions.	Recognising how and why data is collected over time, before using data loggers to carry out an investigation.	Using a flat file database to order data and create charts to answer questions.	Answering questions by using spreadsheets to organise and calculate data.
Programming	To follow simple instructions. To be able to solve simple problems. To make predictions.	Writing short algorithms and programs for floor robots, and predicting program outcomes. Designing and programming the movement of a character on screen to tell stories.	Creating and debugging programs, and using logical reasoning to make predictions. Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz	Creating sequences in a block-based programming language to make music. Writing algorithms and programs that use a range of events to trigger sequences of actions.	Using a text-based programming language to explore count-controlled loops when drawing shapes. Using a block-based programming language to explore count-controlled and infinite loops when creating a game.	Exploring conditions and selection using a programmable microcontroller. Exploring selection in programming to design and code an interactive quiz.	Exploring variables when designing and coding a game. Designing and coding a project that captures inputs from physical devices.