Curriculum Plan for Academic Year 2022-23:   ICT   Kites ARB, Cape Cornwall School

	Autumn Term (A)	Autumn Term (B)	Spring Term (A)	Spring Term (B)	Summer Term (A)	Summer Term (B)	
Unit	Day to Day ICT (iPad Skills)	Graphics	Practical Programming	Scratch Programming	Practical ICT	Hardware	
Topics	• Online Safety and iPad contracts • Microsoft Word • Microsoft PowerPoint • Browsers • Email and Communication	• Introduction to Graphics • Creating Custom Graphics • Adobe Photoshop	• Programming in commercial environments • Machinery • Micro Bit Programming	• How programming works • Creating basic programmes • Scratch Course • The Wider World of Programming	• Observing existing businesses and organisations • Creating a leaflet • Creating a headed letter • Creating an advert • Mail Merge and Data	• Parts of a Computer • Computer Assembly • Peripherals and Ports • Input, Output and Processes • Practical Hardware	
Learning Outcomes	Students will have an understanding of safety measures they should observe when using a computer or mobile device online. Students will look at some of the ways they are required to follow the expectations of the school when using iPads. Students will look at applying everyday skills to their iPads using Microsoft Word which is something they will be expected to use throughout the year across other subjects. Students will look at how to effectively search for and retrieve information from an online source using a web browser as well as being able to talk about the differences between a web browser and a search engine. Students will be able to send and receive emails through Microsoft Outlook.	Students will understand what is meant by graphics and how different people use graphics for a variety of different purposes. Students will look at how they can create their own logos or illustrations using different types of software and will have a knowledge of basic software such as paint and be able to name circumstances under which use of basic graphics software is appropriate. Students will spend the remaining part of this unit using Adobe Photoshop and will learn to use some of the different features to edit and change existing photographs.	Students will understand some of the ways that physical objects use programming and understand what is meant by robotics. Students will look at a number of different types of machinery which operate using programming and carry out day to day tasks. Students will use the remaining part of this unit to look at their BBC Micro Bits and experiment with different programmes following step by step instructions.	Students will look at how a basic programme operates with particular attention on flowcharts and ways that the running of an everyday situation can be written down. Students will be able to create a basic programme which fulfils a set purpose using Scratch. This might be getting something to move across the screen or to make a sound when it reaches a certain point. Students will be able to apply this knowledge to a larger project for which they will receive guidance for their use of Scratch. They will also be provided with several ideas which they can apply to their project. Students will look at some of the other programming languages used for different purposes and will understand the importance of programming in the modern world.	Students will be able to name some of the ways businesses reach their customers and will be able to provide examples from a case study that they will create. Students will apply their skills from the Day to Day ICT unit to create promotional material for a business or organisation which will be provided to them. These will include constructing a leaflet, headed letter paper an advert and creating mail merged letters using Microsoft Excel or Access. Students will look at how a letter is formatted with examples from other sources and will be able to follow this format when constructing their own. Students will look at data and have a basic understanding of the fundamental principles of GDPR and the Data Protection Act. They will be able to answer yes/no questions centred on the appropriate use of data in the UK.	Students will be able to identify different internal parts of a computer as well as understanding the different parts of a standard computer setup. Students will be able to dismantle and re-assemble certain parts of the insides of a computer as well as setting up a base unit with a monitor, keyboard and mouse. Students will be able to recognise a range of different commonly used ports found on the back of a computer and will be able to state the purposes they have. Students will also have an understanding of what is meant by peripherals and will be able to name a range of peripherals that can be used with a computer. From these peripherals, students will be able to state whether each is an input, output or processing device and will be able to explain why this is. Students will take part in a workshop which looks at internal hardware and repairs and will be able to apply their theoretical knowledge of hardware in a practical setting.	

Key Words	Browser, Search Engine, Safety, Microsoft Office.	Crop, Image, Rotation	Programme, Robotics	Scratch, Programme, Sprite, Flowchart, Instructions	Business, Organisation, Leaflet, Database, Data	Hardware, Software, Motherboard, Base Unit, Monitor	
Activities, Practical Tasks and Assessment	• Ongoing practical tasks • Abridged end of topic assessment which will take place through Google Forms.	• Ongoing practical tasks • Abridged end of topic assessment which will take place through Google Forms.	• Ongoing practical tasks • Abridged end of topic assessment which will take place through Google Forms.	• Creating a computer program which uses a variety of features on Scratch.	• Ongoing practical tasks • End of topic assessment • Critical evaluation of material from other sources.	• Ongoing practical tasks • End of topic assessment.	