



Computing Curriculum Plan Overview

Year 8			
Term	Topic	Learning	How can parents' best support
Autumn 1	Programming Languages & Sequencing	Background and brief history of programming languages. Programming languages comparison Introduction to Python Writing Python code Text input and output Variables	There are a number of coding websites that students can access via home if they have access to the internet. Students have been given access to a site called tynker (tynker.com) this provides them with a number of programming languages including Python, Java and block based. The IDLE is also accessible through repl.it and students can continue to work on their tasks and projects at home.
Assessment:			
Autumn 2	Using Images	Understanding how a digital image is constructed with pixels and how quality is measured by resolution. Being able to use found images in a responsible manner and conforming to copyright rules. Know how to edit an image without distortion. Google Search tools / Copyright basics / Google Drive / Image editing.	Encourage your child to log on to their google drive at home and show you how they can share work etc,. Let them tell you about what sort of work they have been doing. Look at images online or in magazines and talk about how they may have been edited. Look at old photos and compare the difference. Talk about who owns images online how can we use them legally.
Assessment:			
Spring 1	Networks and the internet	Understand the various types of networks Look at the various different hardware components Create mock networks and compare the most suitable connection medium that should be used to connect the networks. How are websites displayed to the user. This will also look at browser types and why some browsers can support some sites where others cannot.	When out and about the look at how networks can be seen everywhere both wirelessly and wired. When using the internet spark discussion about how they are able to access the internet through the router in the home and the telephone cable. Explain how the speed of internet connections have become better over the years due to fibre optic compared to the old dial up connections.
Assessment:			
Spring 2	Video Editing	This module also acts as a refresher of the E-Safety that pupils did in the first half of the Autumn term. Students will use video editing software to create a news report reel called "keeping safe online"	Get involved with what the children may be doing online. Talk about possible online dangers. Watch news and talk about any appropriate news items. If possible download some free video editing software there is also in browser software available. Have students create their own videos in their own time to get used to the skills of video editing.
Assessment:			
Summer 1	Computer Components	Students will look at the components that make up a computer system. They will compare input and output systems and identify key misconceptions. Students will begin to look at how programming can change when using machine code and the fetch - execute cycle.	Looking at the technology in and out of the home, discuss with students what components make up this technology. Have a discussion about the possible input and output devices that this technology may have.
Assessment:			
Summer 2	Website Design	Research a subject. Collect components. Copyright Understanding Planning Layouts Key tools and formatting	Look at websites with your child and discuss the various aspects that make it visually appealing, easy to navigate and the usefulness of the site. Poor points... what could be improved? What makes a website good?

		Banners / Roll overs / links	