The Farnborough Academy

Year 9 Curriculum Map
Faculty/Subject: Computing

Unit 9.1 Topic: Create a CD Cover	Unit 9.2 Topic: App Design	Unit 9.3 Topic: Safer Internet Day	Unit 9.4 Topic: Python Programming	Unit 9.5 Topic: Computer Systems 3
Intent: This unit gives pupils an opportunity to be creative using a computer – specifically Photoshop – to produce a CD cover. The unit has a vocational element, looking at the way in which covers are developed for artists. There is also technical elements which are more enjoyable to learn via practical task, such as image DPI, resolution, compression etc. **Assessment Focus:** Pupils are assessed by looking at the portfolio created – a drawn sketch	**Intent:** This unit is designed to combine the design skills learnt in Unit 9.1 and the programming skills from previous years to create an app for the Academy. This unit encompasses the differences between mobile sites and apps, looking at how hardware is used by apps (such as cameras, GPS). The unit is heavily vocationally focussed, supported by local app developer MultiPie, to give a real insight to app development.	**Intent:** For Safer Internet Day in February, this unit gives pupils an opportunity to join in with the national program to look at a theme of online safety. With pupils being older than their last unit, more mature and relevant topics can now be explored to help pupils learn how to protect themselves and others online. **Assessment Focus:** This task is assessed via a range products pupils might create – this is quite open ended and so content is the focus. Pupils	**Intent:** This units gives pupils an opportunity to again practice and build upon programming skills but in a more challenging textual-based programming environment. This is to prepare pupils using the common language of Python, frequently used to create programs internationally. Pupils use the same core concepts, applying them using text-based programming. From 2020, an advanced unit will be delivered, with first teaching of Python 1 taking place in Year 8 in 2019.	**Intent:** Computer systems is a cornerstone of computer science, and the third Key Stage 3 unit adds depth to the concepts learnt in Year 7 and 8. This includes: • Data representation • Data compression • CPU architecture (which has only been covered very simplistically before) • Processor types and speeds • Types of memory This gives pupils a much more fuller and rounded

plan with the elements of design explained, the CD cover itself and their technical assessment that demonstrates understanding of file formats, compression etc as mentioned previously. A baseline test occurs during this unit also.	**Assessment Focus:** Pupils use a workbook to demonstrate the key skills learnt – design skills and programming skills. The app is also tested for functionality.	must show an awareness of both current and persistent online threats and how to overcome them.	**Assessment Focus:** Pupils complete a workbook of increasingly challenging programming tasks, each week applying the core skills now learnt in several prior units. The workbook is heavily differentiated to allow progress at all levels, but also to challenge those who have an excellent grasp of the fundamental elements. **Assessment Focus:**	picture of how computers work and provide baseline knowledge for any further study. **Assessment Focus:** Pupils complete a formative assessment workbook, supported by a summative end of unit test.