Year / Topic	Term	National Curriculum Links	Length of Topic
8.3 Spreadsheet Modelling and App Design	Spring 1	DL3.1	6 Weeks
Resources Microsoft Excel App Furnace	 Key Classroom ICT Activity In the first part of this unit students will begin by reinforcing their knowledge on spreadsheets. This will include recapping writing basic formula and creating charts. They will then learn how to sort data into tables, to write absolute cell references and to use advanced tools such as conditional formatting. In the second part students will look at App Design. Discussing what makes a good app and looking at coding used to do this. They will create an app on a topic of their choice. By the end of the topic students will be able to: Use advanced spreadsheet skills. Be able to design and create an App for use on a mobile or a tablet. Be aware of issues regarding the application of information technology. 		
Target Skills Advanced spreadsheet formula Conditional Formatting Graphing Data App Design			
Curriculum Links D&T – Designing an App for mobiles and tablets. English – Writing Maths – Graphing Data	Assessment - Progression Pathways All children should – DL, Makes judgements about digital content when evaluating and repurposing it for a 'given audience'. Selcetcs, combines and uses internet service. DL, Identifies and explains how the use of technology can impact on society. Uses technologies and online services. Most children should – DL, Recognises that persistence of data on the internet requires careful protection of online identity and privacy. Some children should - DL, Understand the ethical issues surrounding the application of information technology, and the existence of legal frameworks governing its use e.g. Data Protection Act, Computer Misuse Act, Copyright etc.		
E-Safety Coverage Consider the importance of keeping personal information, including names of people private. Consider copyright when sourcing images.			

Assessment Criteria 8.3 Spreadsheet Modelling and App Design		
Emerging	 ✓ I can make judgements about digital content when evaluating and repurposing it for a given audience. ✓ I can setup and enter data into a spreadsheet with minimal help. ✓ I can use some basic formulas. 	
Developing	 ✓ I can identify and explain how the use of technology can impact on society. ✓ I can setup and enter data into a spreadsheet with no help. ✓ I can use the sum, max, min and average formula. ✓ I can create tables and charts in Excel. 	
Secure	 ✓ I can use conditional formatting. ✓ I can use formulas across multiple spreadsheets. ✓ I can use the countif formula, ✓ I can recognise the formulas required to carry out a particular task. 	
Mastered	 ✓ I can show practical experience of a small low level programming language. ✓ I can critically evaluate the success of my solution and reflect on my work. ✓ I can use code where possible to create my own app. 	