

Computer Science Medium Term Planning **Year 4**

4.1 We are co-authors Producing a wiki	4.2 We are meteorologists Presenting the weather	4.3 We are historians Then and now: databases	4.4 We are artists Fusing geometry and programming	4.5 We are musicians Producing digital music
<ul style="list-style-type: none"> • To understand the social and technological conventions for collaborative online work, particularly in wikis • To become familiar with Wikipedia, including potential problems associated with its use • To practise research skills: searching, selecting and assessing information for a given purpose • To practise writing for a target audience using a wiki tool • To develop collaboration skills • To develop proofreading skills, linked with spelling and grammar work in literacy • PB Works 	<ul style="list-style-type: none"> • To understand different measurement techniques for weather, both analogue and digital • To use computer-based data logging to automate the recording of some weather data • To use spreadsheets to create charts • To analyze data • To explore inconsistencies in data and make predictions • To practice using presentation software and, optionally, video • Microsoft Excel • Datadisc PT • Microsoft Powerpoint 	<ul style="list-style-type: none"> • To develop familiarity with historical databases accessed via the Web, including searching for and selecting data with given criteria • To set up and enter data to a simple 'flat-file' database • To analyze data, drawing comparisons • To present the results of analysis • (Optionally) To use other tools to explore historical data • Microsoft Excel • Information Workshop. 	<ul style="list-style-type: none"> • To learn how to code efficiently with the use of repeats. • Design, write and debug programs that accomplish specific goals; solve problems by decomposing them into smaller parts. • Use sequence, selection and repetition in programs. • Use logical reasoning to explain how simple algorithms work and to detect and correct errors in algorithms and programs. • To develop an understanding of turtle graphics and related programming concepts, such as a repeat loop • Education City: Matching code to shapes • Education City: Matching shapes to code. • Education City: Repeat loop • Scratch or Kodu 	<ul style="list-style-type: none"> • To use one or more music or sound editing programs • To develop an understanding of the process of creating and developing their composition, refining their ideas through reflection and discussion • To develop collaboration skills, as they share in the process of composing, recording and editing music • To develop an awareness of how their composition can enhance work in other media • Musescore • Audacity