Year 8 Computing

Link to NC	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Content Knowledge	Interactivity: Interactive story	Spreadsheet Modelling	Physical computing - Micro Bits	Intro to pre-production : Game design	Intro to Python	Technology and our planet
Skills	Use of flowcharts and visualisation diagrams to describe algorithms.	Design and use computational abstractions to solve real-world problems.	Create programs for the micro bit using text based programming.	Develop an understanding of the pre-production processes utilised in the creation of digital games.	Using a text based program to learn about the constructs of sequence, selection and iteration	Explore issues related to technological developments and their effects on our environment.
Key Questions	How do the user's needs influence design decisions?	What are the most effective ways to analyse data? What is the difference between data and information?	What are the essential features of text based programs?	What are pre production documents and why do we use them?	How does Python differ from other programming languages?	Do innovations in technology affect our lives for the better or worse?
Assessment	Low stakes/POP tests and End of Unit tests.					
Literacy/numera cy/SMSC/Chara cter	Literacy is incorporated into the schemes of work specifically where students are required to analyse, plan and review their digital creations. Students will engage with and question their own work and that of their peers, they will identify how beliefs and values can influence the design of digital products.					
Enrichment opportunities and futures	Code club which runs at lunch time once per week. Students participate in the iDEA program of skills and badges. Opportunities to enter Bebras UK challenges: https://www.bebras.uk/					