|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Year 8 – Computing 2024-5** | | | | | |
| **Curriculum intent** | The aim of the curriculum is that through the delivery of the schemes of work, students are guided to becoming digital citizens, able to further develop understanding of the key concepts sequence, selection and iteration.  There is the opportunity to further develop workplace skills using ICT based software Microsoft Office and the National Curriculum Computing key concepts are studied.  Students will develop theoretical concepts through practice and programming. The sequence of lessons supports students developing deeper knowledge and builds on the foundations laid in Year 7. | | | | |
| **Term** | **Topic 1&2 (Week 1-12)** | **Topic 2 (Week 7-15)** | **Topic 3 (Week 15-25)** | **Topic 4 (Week 25-35)** | **Topic 5 (Week 36-39)** |
| **Knowledge** | Intro to Network,  E-Mail and E-Safety  Students will explore the school network and how to use it safely. They will explore e-safety dangers and ways to stay e-safe. Students will aim to pass the Rayner Stephens Computer Driving License.  END OF UNIT: IDEA AWARD | [Block](https://teachcomputing.org/curriculum/key-stage-3/networks-from-semaphores-to-the-internet) based & Python programming  Students will further develop programming skills using Scratch block based programming and an introduction to Python.  Development of the four cornerstones of computing decomposition, pattern recognition, abstraction and algorithm and an introduction to key programming terms sequence, selection and iteration.  END OF UNIT: IDEA AWARD | Computational Thinking - Logic/ Binary  Development of computer systems and networks to focus on hardware and software, peripherals, input, output and storage devices.  Student will explore what is meant by logic and binary. Focussing on how this links to coding and computers following instructions.  Identify and build NOT/AND/OR logic gates  END OF UNIT: IDEA AWARD | CyberExplorers – Cyber Security  Introduction for students to cyber security. They will complete challenges to learn vital E-Safety skills.  Key skills include setting secure passwords and keeping private data secure.  END OF UNIT: IDEA AWARD | IDEA Award  The Inspiring Digital Enterprise Award (IDEA) to develop digital, enterprise and employability skills for free.  Online challenges, to achieve career-enhancing badges and consolidate learning across the topics and build on work place skills to create digital citizens.  END OF UNIT: IDEA AWARD |
| **Skills:**  **Computing/ Digital Literacy/ICT** | Key Software Skills: E-Mail, Search Engines , Presentation | Key Software Skills: Programming | Key Software Skills: Microsoft Word & Powerpoint | Key Software Skills: Excel, Numeracy | Key Software Skills: Word Processing, Creativity, Coding |
| **Assessments** | Teacher Q&A and formative assessment to check for student understanding throughout.  Self Assessment.  End of unit Teacher assessment to provide feedback and RAMP. | Teacher Q&A and formative assessment to check for student understanding throughout.  Self Assessment.  Project to assess key skills and I CAN statements. Teacher to provide feedback and RAMP. | Teacher Q&A and formative assessment to check for student understanding throughout.  Self Assessment.  End of unit Teacher assessment to provide feedback and RAMP. | Teacher Q&A and formative assessment to check for student understanding throughout.  Self Assessment.  End of unit Teacher assessment to provide feedback and RAMP. | Teacher Q&A and formative assessment to check for student understanding throughout.  Self Assessment.  Project to assess key skills and I CAN statements. Teacher to provide feedback and RAMP. |
| **Enrichment** | Coding & Minecraft club  IDEA Award | Coding & Minecraft club  IDEA Award | Coding & Minecraft club  IDEA Award | Coding & Minecraft club  IDEA Award | Coding & Minecraft club  IDEA Award |