

| | Year 8 – Computing 2021-22 | | | | | | | |
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| Curriculum intent | The aim of the curriculum is that through the delivery of the rubrics learners are able to further develop understanding of some of the key concepts required as the foundational building blocks necessary to build knowledge and foster a love of learning about computing. Learners receive Computer Science related units of work in order to further develop basic understanding of key concepts that provide a sound foundation for those choosing to continue studying a computing pathway at GCSE. Learners receive a mixture of practical and theory based lessons that include opportunities for learners to further develop independent learning, collaboration and discussion skills. | | | | | | | |
| Term | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 | | |
| Knowledge | Intro to Network, E-Mail and E- Safety: | <u>Representations –</u> <u>from clay to silicon</u> Introduce binary | <u>Programming</u> <u>essentials in</u> <u>Scratch – part I</u> | <u>Programming</u> <u>essentials in</u> <u>Scratch – part II</u> | Networks from semaphores to the Internet | <u>Using media –</u> Gaining support for a cause | | |
| | Learners will explore the school network and how to use it safely. They will explore e-safety dangers and ways to stay e-safe. | digits to your learners as the symbols computers use to perform these tasks and focus on the representation of text and numbers. | Learners will explore the skills required to create a basic computer programme using Scratch programming language. The main programming concepts covered in this unit are sequencing, | This unit begins right where 'Programming I' left off. Learners will learn how to create their own subroutines, develop their understanding of decomposition, learn how to create and use lists, and build upon their problem-solving | Learners will define a network and addressing the benefits of networking, before covering how data is transmitted across networks using protocols | They will develop a deeper understanding of information technology and digital literacy by using their skills across the unit to create a blog post about a real world cause that they are passionate about and would like to gain support for. | | |



| | | | variables, selection, and count-controlled iteration. | skills by working through a larger project at the end of the unit. | | |
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| Skills | Key Software Skills: E-Mail, Search Engines , Presentation | Key Software Skills: Numeracy, Programming | Key Software Skills: Programming | Key Software Skills: Programming | Key Skills: Word Processing, Presentation | Key Skills: Word processing software Software to create a blog (eg word processing software)) |
| Assessments | Teacher Q&A, Learner oracy opportunities Teacher learning analysis mid-way through the completion of task and provide feedback the following lesson Peer assessment Self assessment End of unit | Teacher Q&A, Learner oracy opportunities Teacher learning analysis mid-way through the completion of task and provide feedback the following lesson Peer assessment Self assessment End of unit | Teacher Q&A, Learner oracy opportunities Teacher learning analysis mid-way through the completion of task and provide feedback the following lesson Peer assessment Self assessment End of unit | Teacher Q&A, Learner oracy opportunities Teacher learning analysis mid-way through the completion of task and provide feedback the following lesson Peer assessment Self assessment End of unit | Teacher Q&A, Learner oracy opportunities Teacher learning analysis mid-way through the completion of task and provide feedback the following lesson Peer assessment Self assessment End of unit | Teacher Q&A, Learner oracy opportunities Teacher learning analysis mid-way through the completion of task and provide feedback the following lesson Peer assessment Self assessment End of unit |
| | Teacher assessment. Teacher learning analysis, provide |



| | feedback the following session. | feedback the following session. | feedback the following session. | feedback the following session. | feedback the following session. | feedback the following session. |
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| Enrichment | Coding club | Coding club | Photoshop design | Photoshop design | Industry speaker- | Bletchley Park research |