Rayner Stephens HIGH SCHOOL

	Year 7 – Computing 2021-22					
Curriculum intent		The aim of the curriculum is that through the delivery of the rubrics learners are able to 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 a mixture of both ICT and Computer Science related units of work in order to bridge any gaps presented from the Primary curriculum received, address any misconceptions and further stretch learner understanding of identified key concepts. Learners receive a mixture of practical and theory based lessons that include opportunities for learners to develop their independent learning, collaboration and discussion skills. NB: This curriculum overview has been planned using support from teachcomputing.org				
Term	**Autumn 1**	**Autumn 2**	**Spring 1**	**Sprng 2**	**Summer 1**	**Summer 2**
Knowledge	<u>Intro to Network, E-Mail and E-Safety</u>: Learners will explore the school network and how to use it safely. They will explore e-safety dangers and ways to stay e-safe.	<u>Modelling data – spreadsheets:</u> Introduction for learners to spreadsheets and the concept of cell referencing. They will collect, analyse, and manipulate data, before turning it into graphs and charts.	<u>Programming essentials in Scratch – part I</u> Learners will explore the skills required to create a basic computer programme using Scratch programming language.	<u>Programming essentials in Scratch – part II</u> 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	<u>Networks from semaphores to the Internet</u> Learners will define a network and addressing the benefits of networking, before covering how data is transmitted across networks using protocols	<u>Using media – Gaining support for a cause</u> 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.

			The main programming concepts covered in this unit are sequencing, variables, selection, and count-controlled iteration.	create and use lists, and build upon their problem-solving skills by working through a larger project at the end of the unit.		
Skills	Key Software Skills: E-Mail, Search Engines , Presentation	Key Software Skills: Excel, Numeracy	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	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	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	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	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	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

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Enrichment	Coding club	Coding club	Photoshop design	Industry speaker-	Semaphor flags – after school	Bletchley Park research