Year 7, Computing Curriculum Overview

	Autumn Term 1 Topic(s)	Autumn Term 2	Spring Term 1
Overview of Scheme of Learning	Passwords/Network/Housekeeping • Username and password • How to access Office 365 • How to save documents in their own area • How to use the shared area PowerPoint • What makes a good PowerPoint • Introduce themselves Digital Learners • How to conduct a simple google search • How to conduct an advanced google search using Boolean to get a more specific result • How to determine if a website is reliable or not • What is the difference between a reliable website and a valid website	E-Safety • Cyberbullying - Understand the risks and solutions of cyber bullying and peer on peer abuse • Online grooming - Understand the risks and solutions of online grooming • Social Networking - The dangers and solutions of social media sites and chat rooms • Mobile phones - The <u>dangers</u> and <u>solutions</u> of having and using a mobile phone and sexting • Computer viruses - Understand the different effects that can cause harm to your computer or device • Revision – recap of all things learnt in previous lessons • Test	Word-History of computers • How technology has impacted us, creating a business report • The first computers – how and when the first computers were invented, use search engine to locate images, format images in a report • Computing history timeline – Create a timeline for computer history development, using tables • Moore's law – Know what Moore's law and be able to explain it, relate Moore's law to the development of computers, insert charts into a report • Current developments – know the current developments, learn how to summarise using bullet points • The future – predict future developments in technology, use SmartArt to present an idea • Summary an conclusion – Summarise findings in a report

Assessment Overview	Questioning Worksheets Homework Written assessment	Questioning Homework Produce an e-safety document by the end of the topic Written assessment	Questioning Marking of work with feedback and improvements A report created in Word will be produced by the end of the topic to show that students can and have used a variety of features and functions

Year 8, Computing Curriculum Overview

	Autumn Term 1 Topic(s)	Autumn Term 2	Spring Term 1
Overview of Scheme of Learning	Databases • Spreadsheet database – what is a database, what is validation • Filtering – Methods of searching for something specific, how to use the filter tool • Creating a spreadsheet database • Access database – what is Access? Creating characters for access database • Creating a table – Good database design, Field names, appropriate data types, primary keys, entering data • Form design – Form wizard, form design view, adding buttons, adding pictures • Reports - Report wizard, report design view, changing the layout of a report, creating cards • Searching and Queries – Query design view, criteria, find a set of records based on a particular criteria.	Hardware/Software • Hardware – What is hardware, identify different types of hardware, what they do and how they have been changed over the last 30 years. • Software – what is software, what are the different types, how are they used? • Inputs/Outputs – What are inputs and outputs, input and output devices Computational thinking • What is computational thinking? – logical thinking, types of computational thinking • Algorithms – creating algorithms, identifying algorithms, how they are used in everyday life • Decomposition - what is decomposition, examples, solving problems using decomposition • Pattern recognition – How to recognise patterns, examples of problem solving using patterns • Abstraction – what is abstraction, why it is useful, how to apply it.	Python • Getting started – what is a program, what is Python, Python software, Strings, syntax error, writing a simple program. • Text, Maths and Loops – formatting text, different operands, operators, integers and floats, combing text and maths, basic loops, variables • Python Turtle – import function, advanced loops, pen tools • Selection and user input – If, elif and else, asking the user to answer questions, create a mini game. • Advanced user input – asking for specific data input, editing strings. • Functions – learn about functions, write own functions, mini guessing game • The tkinter library – making an etch-a-sketch • Programming project

Assessment Overview	Questioning Database tasks Produce a working database Practical assessment – create their own database from scratch	Questioning Homework Written assessment	Questioning Ability to debug their own programs Programming project PRIMM – predict, run, investigate, modify, make