Subject Overview Computing – Year 7

The Year 7 Computing curriculum at Rastrick Polaris is designed to support all pupils through sequenced lessons and scaffolded activities, ensuring every student can succeed. Over the year, students will cover essential computing skills, starting with an introduction to ICT and basic device usage. They will progress to programming with Scratch, focusing on subroutines and lists, followed by mobile app development using AppLab for event-driven gaming apps. The curriculum also includes data representation with Microsoft Excel spreadsheets and an introduction to HTML coding, alongside effective search technologies and digital content evaluation

	Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
Knowledge & Skills	**Unit 1 Introducing to ICT and Computing (7 Lessons)** Learning how to use school desktop devices and key skills with emails and the Microsoft Teams virtual learning environment.	**Unit 2 Scratch: Programming essentials Part I (7 Lessons)** Using subroutines to decompose a problem that incorporates lists in Scratch..	**Unit 3 AppLab: Mobile app development (6 Lessons)** Using event-driven programming to create an online gaming app that can be downloaded to digital devices.	**Unit 3 Cont AppLab: Mobile app development (6 Lessons)** Using event-driven programming to create an online gaming app that can be downloaded to digital devices.	**Unit 4 Data Representation - Spreadsheet Modelling (6 Lessons)** Using Microsoft Excel to format, organize and calculate data in a spreadsheet. Learning how to make information easier to view as data is added or changed. **Assessment 1** • Introduction • Scratch • App Development • Spreadsheets	**Unit 5 HTML Coding & Use search technologies effectively. (6 Lessons)** Appreciate how results are selected and ranked, and be discerning in evaluating digital content.
Beyond The Curriculum	**Places to visit** National Museum of Computing (Bletchley Park) **Websites to explore** BBC Bitesize Computing (KS3) **Wider reading / periodicals** "Code: The Hidden Language of Computer Hardware and Software" by Charles Petzold **Enrichment clubs / competitions / trips** Coding Club – IT2	**Places to visit** Science and Industry Museum (Manchester) **Websites to explore** Code.org **Wider reading / periodicals** "Lauren Ipsum: A Story About (Almost) Everything" by Carlos Bueno: **Enrichment clubs / competitions / trips** Coding Club – IT2	**Places to visit** Life Science Centre (Newcastle upon Tyne) **Websites to explore** Scratch (MIT Media Lab): **Wider reading / periodicals** "Hello World: You Can Learn to Code" by Hannah Fry and Thomas Ford **Enrichment clubs / competitions / trips** Coding Club – IT2	**Places to visit** The Centre for Computing History (Cambridge) **Websites to explore** Khan Academy - Computer Science **Wider reading / periodicals** "Algorithms to Live By: The Computer Science of Human Decisions" by Brian Christian and Tom Griffiths: **Enrichment clubs / competitions / trips** Coding Club – IT2	**Places to visit** Local Universities with Computer Science Departments **Websites to explore** Computer Science Unplugged: **Wider reading / periodicals** "Computational Thinking" by Jeannette M. Wing: **Enrichment clubs / competitions / trips** Coding Club – IT2	**Places to visit** Local IT Repair Shops/Computer Manufacturers: **Websites to explore** CS First (Google) **Wider reading / periodicals** Articles on the history of computing **Enrichment clubs / competitions / trips** Coding Club – IT2