

## Key Stage 3 Program of study 2022-2023

	Year 7	Year 8	Year 9
Autumn 1	<p><b>Introduction to network</b></p> <p>Login and introduction to network</p> <p>Email</p> <p>Go4schools</p> <p>Acceptable Use Policy</p> <p>Access to cloud and online school resources</p> <p>Baseline test (Assessment 1)</p> <p>E-safety – Create poster</p> <p>Research skills</p>	<p><b>Working practices</b></p> <p>E-safety, get familiar with any changes to school systems</p> <p><b>Spreadsheets</b></p> <p>Cell referencing</p> <p>Formatting</p> <p>Sorting</p> <p>Formulas</p> <p>Functions</p> <p>Charts</p> <p>More drill activities</p>	<p><b>Working practices</b></p> <p>E-safety, get familiar with any changes to school systems</p> <p><b>Spreadsheets</b></p> <p>Cover the content of the European Computing Driving Licence (ECDL)</p> <p><i>(Assessment 1)</i></p>
Autumn 2	<p><b>Bebras computational thinking challenge</b> <i>(Assessment 2)</i></p> <p><b>History of computing</b></p> <p>Research, create, plan and evaluate a presentation on the history of computing <i>(Assessment 3)</i></p>	<p><b>Exam</b> <i>(Assessment 1)</i></p> <p><b>Bebras computational thinking challenge</b> <i>(Assessment 2)</i></p> <p><b>Databases</b></p> <p>Data types, characteristics of database tables, simple SQL queries</p> <p>1-2 lessons, find database with queries, datatypes</p>	<p><b>Bebras computational thinking challenge</b> <i>(Assessment 2)</i></p> <p><b>Python programming</b></p> <p>Review topics covered in year 8 and cover iteration and apply techniques to solving problems</p> <p><b>Assessment</b></p>

Spring 1	<p><b>Hardware and Software</b></p> <p>Includes Inputs, processing and Outputs Create a brochure using desk top publishing (<i>Assessment 3</i>)</p>	<p><b>Flowol</b></p> <p>Assesment</p>	<p><b>Algorithms and data representation</b></p> <p>Binary-denary conversion</p> <p>Character coding</p> <p>Encryption – Caesar</p> <p>Bitmap graphics</p> <p>Vector graphics</p> <p>Sound</p> <p>Fetch execute cycle</p> <p>Boolean logic gates</p> <p>Searching algorithms</p> <p>Sorting algorithms</p>
Spring 2	<p><b>Sequencing</b></p> <p>Use Flowol to create flowcharts for control various systems from traffic lights to more complex control systems</p>	<p><b>Animation</b></p> <p>Create 2D animations and use techniques such as layering, shape and motion tweening</p>	<p><b>BYOB</b></p> <p>Design and create a game in BYOB</p>
Summer 1	<p><b>Logo Programming</b></p> <p>Draw shapes by programming a turtle to introduce some of the basic concepts of coding including sequencing and iteration.</p> <p><b>Assessment</b></p>	<p><b>Websites</b></p> <p>Creating websites using HTML and CSS</p> <p>Move on to dreamweaver, planning</p> <p>Assessment</p>	<p><b>Product launch using multimedia</b> –image editing - poster</p> <p>Film advert</p>
Summer 2	<p><b>Block based coding in Scratch</b></p> <p>Continue to develop coding and introducing additional concepts like assignment, selection and concurrency.</p>	<p><b>Advertising campaign using multimedia</b></p> <p>Pupils can use a variety of multimedia to advertise a product – making a radio advert</p> <p>Multimedia video – ipads, tying shoe laces, working in groups.</p> <p>Planning and shooting a film, with homework.</p>	