

# Key Stage 3 Computing Curriculum at CVC

## Year 7 Program of Study

	<b>Year 7</b>
<b>Autumn 1</b>	<p><b>Introduction to network</b>            Login and introduction to network            Email            Go4schools            Acceptable Use Policy            Online privacy, digital footprint, cyberbullying</p> <p>Access to cloud (Onedrive) and online school resources            Catalogue, Teams, Onenote            Baseline test (<i>Assessment 1</i>)            E-safety – Create poster            Research skills</p>
<b>Autumn 2</b>	<p><b>Bebras computational thinking challenge</b> (<i>Assessment 2</i>)</p> <p><b>History of computing</b>            Research, create, plan and evaluate a presentation on the history of computing (<i>Assessment 3</i>)            Encryption – Caesar</p>
<b>Spring 1</b>	<p><b>Hardware and Software</b>            Includes Inputs, processing and Outputs, Fetch execute cycle            Create a brochure using desk top publishing (<i>Assessment 4</i>)</p>
<b>Spring 2</b>	<p><b>Data representation</b>            Binary-denary conversion            Character coding            Representing bitmap graphics</p>
<b>Summer 1</b>	<p><b>Logo Programming</b> (<i>Assessment 5</i>)            Draw shapes by programming a turtle to introduce some of the basic concepts of coding including sequencing and iteration.            Vector Graphics</p>
<b>Summer 2</b>	<p><b>Block based coding in Scratch</b>            Continue to develop coding and introducing additional concepts like assignment, selection and concurrency.            Bitmap graphics</p> <p><b>Microbits</b>            Introduction to Microbits, input and output, use electronics (2-3 lessons)</p>

## Year 8 Program of Study

<b>Year 8</b>	
<b>Autumn 1</b>	<p><b>Working practices</b> E-safety update, Online privacy, digital footprint, cyberbullying, fake news</p> <p>Get familiar with any changes to school systems</p> <p>Bitmap graphics</p> <p><b>Spreadsheets</b> Create a theatre booking system covering the following:</p> <ul style="list-style-type: none"> <li>✓ Cell referencing</li> <li>✓ Formatting</li> <li>✓ Sorting</li> <li>✓ Formulas</li> <li>✓ Functions</li> </ul>
<b>Autumn 2</b>	<p><b>Exam (Assessment 6)</b></p> <p><b>Bebras computational thinking challenge (Assessment 7)</b></p> <p><b>Data</b> Collecting survey data and analysing using spreadsheets</p> <p><b>Artificial Intelligence</b> What is it, ethics focus?</p>
<b>Spring 1</b>	<p><b>Sequencing &amp; Control (Assessment 8)</b> Create flowcharts to represent algorithms for controlling various systems from traffic lights to more complex control systems. Uses Flowol Control a variety of systems using Flowol</p>
<b>Spring 2</b>	<p><b>Animation</b> Create 2D animations and use techniques such as layering, shape and motion tweening, frames, onion skinning Vector graphics</p>
<b>Summer 1</b>	<p><b>Websites (Assessment 9)</b> Creating websites using HTML Create a 3 page static website Move on to Dreamweaver, planning</p>
<b>Summer 2</b>	<p><b>Advertising campaign using multimedia</b> Pupils can create a variety of multimedia products Making a radio advert / podcast/sound Video – Use ipads, iMovie to record and edit eg tying shoe laces, working in groups. Planning and shooting a short film</p>

## Year 9 Program of Study

<b>Year 9</b>	
<b>Autumn 1</b>	<p><b>Working practices</b> E-safety update: , Online privacy, digital footprint, cyberbullying, fake news, mental wellbeing</p> <p>Get familiar with any changes to school systems</p> <p><b>Spreadsheets</b> Cover the content of the European Computing Driving Licence (ECDL) (<i>Assessment 10</i>)</p>
<b>Autumn 2</b>	<p><b>Bebras computational thinking challenge</b> (<i>Assessment 11</i>)</p> <p><b>Python programming</b> Input, output, assignment, Selection, iteration (<i>Assessment 12</i>)</p>
<b>Spring 1</b>	<p><b>Data representation</b> Binary-denary conversion Character coding Encryption – Caesar Bitmap graphics Vector graphics Sound Fetch execute cycle Boolean logic gates How computers communicate</p>
<b>Spring 2</b>	<p><b>Game making</b> Design and create a game Create a mobile phone app that has revision resources</p>
<b>Summer 1</b>	<p><b>Product launch using multimedia</b></p> <p>image editing – poster, packaging using Photoshop Film an advert (iMovie, moviemaker) Pitch the product</p>
<b>Summer 2</b>	<p><b>Preparation for the iDEA award</b> This will be continued in form time during Years 10 and 11</p>