



## Computing School Overview

Teach Computing Scheme of Work and Progression Documents Used- 1<sup>st</sup> lesson of each half term = e-safety

Hardware/equipment needed End goal	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Autumn 1	<u>Technology around us</u>  Desktop Hardware/Software: Developing Keyboard and mouse skills	<u>Technology around us</u>  Desktop Hardware/Software: Microsoft PowerPoint To identify Technology around us & what it does.	<u>Connecting computers</u>  Desktop Hardware/Software: Painting program Understanding Inputs, Outputs and Networks	<u>The internet</u>  Desktop Hardware/Software: Various websites Understanding the WWW & its content	<u>Sharing information</u>  Desktop Hardware/Software: Understanding of computer systems and how information can be transferred	<u>Communication</u>  Desktop Hardware/Software: Understanding search engines & communication methods online
Autumn 2	<u>Creating media- digital painting</u>  Desktops Hardware/Software: Microsoft Paint Creating various types of Art	<u>Digital photography</u>  Hardware/Software: Digital camera (Ipads) To gain experience taking, editing, and improving photos.	<u>Animation</u>  Hardware/Software: iMotion (Ipads) Creating a stop-motion Animation	<u>Audio editing</u> Desktop Hardware/Software: Audacity (Ipads/microphones) Creating a Podcast	<u>Video editing</u>  Desktop Hardware/Software: Microsoft Photos (Ipads) Creating an Edited Video	<u>Web page creation</u>  Desktop Hardware/Software: (Ppt) Creating a functioning 'Website'
Spring 1	<u>Programming- moving a robot</u>  Hardware (Ipads/BeeBot) Understanding basic programming and prediction of commands	<u>Robot algorithms</u>  Hardware/Software: (Ipads) Revisiting programming and prediction of commands	<u>Programming- sounds</u>  Desktop Hardware/Software: Scratch Creating a music program on scratch	<u>Programming- repetition in shapes</u>  Desktop Hardware/Software: FMSLogo Program the algorithms for various	<u>Programming- selection in physical computing</u> Desktop Hardware/Software: Crumble controller + starter kit Programming and building a mechanical design	<u>Programming- variables in games</u>  Desktop Hardware/Software: Scratch Design and program various games and their variables



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Spring 2	<p style="text-align: center;"><u>Grouping data</u></p> <p style="text-align: center;">Desktop Hardware/Software: Microsoft PowerPoint</p> <p style="text-align: center;"><b>Labelling and groups small sets of Data</b></p>	<p style="text-align: center;"><u>Pictograms</u></p> <p style="text-align: center;">Desktop Hardware/Software: j2data Pictogram</p> <p style="text-align: center;"><b>To collect data and create several Pictograms</b></p>	<p style="text-align: center;"><u>Branching data bases</u></p> <p style="text-align: center;">Desktop Hardware/Software: j2data Branch and Pictogram</p> <p style="text-align: center;"><b>To sort and create objects into a Branching Database</b></p>	<p style="text-align: center;"><u>Data logging</u></p> <p style="text-align: center;">Desktop Hardware/Software: <b>(Ipads)</b></p> <p style="text-align: center;"><b>Using a Data Logger app to collect and analyse Data</b></p>	<p style="text-align: center;"><u>Flat file data bases</u></p> <p style="text-align: center;">Desktop Hardware/Software: j2data Database <b>Using Flat-File Databases to collect data and answer questions</b></p>	<p style="text-align: center;"><u>Introduction to spreadsheets</u></p> <p style="text-align: center;">Desktop Hardware/Software: Microsoft Excel</p> <p style="text-align: center;"><b>To fill in and program a functioning Spreadsheet</b></p>
Summer 1	<p style="text-align: center;"><u>Creating media- digital writing</u></p> <p style="text-align: center;">Desktop Hardware/Software: Microsoft Word</p> <p style="text-align: center;"><b>Become familiar with keyboards to enter and remove text</b></p>	<p style="text-align: center;"><u>Making music</u></p> <p style="text-align: center;">Desktop (Tablet) Hardware/Software: Chrome Music Lab</p> <p style="text-align: center;"><b>Creating a variety of musical tunes</b></p>	<p style="text-align: center;"><u>Desktop publishing</u></p> <p style="text-align: center;">Desktop Hardware/Software: Microsoft Publisher</p> <p style="text-align: center;"><b>Using templates and Layouts, creating publications such as magazine front covers</b></p>	<p style="text-align: center;"><u>Photo editing</u></p> <p style="text-align: center;">Desktop Hardware/Software: Paint.NET (for Microsoft Windows) <b>To create a variety of photoshopped pictures</b></p>	<p style="text-align: center;"><u>Creating media- vector drawing</u></p> <p style="text-align: center;">Desktop Hardware/Software: Powerpoint <b>To create a range of images using various shapes</b></p>	<p style="text-align: center;"><u>3D modelling</u></p> <p style="text-align: center;">Desktop Hardware/Software: Tinkercad <b>To create and design a range of 3D models</b></p>
Summer 2	<p style="text-align: center;"><u>Programming- programming animations</u></p> <p style="text-align: center;">Tablet (Desktop) Hardware/Software: <b>ScratchJr</b></p> <p style="text-align: center;"><b>Creating a simple Racing animation in ScratchJr</b></p>	<p style="text-align: center;"><u>Programming quizzes</u></p> <p style="text-align: center;">Tablet (Desktop) Hardware/Software: <b>Creating an interactive Quiz Ipads/ScratchJr</b></p>	<p style="text-align: center;"><u>Programming- events and actions in programmes</u></p> <p style="text-align: center;">Desktop (Tablet) Hardware/Software: Scratch <b>Programming movement and a painting program in Scratch</b></p>	<p style="text-align: center;"><u>Programming- repetition in games</u></p> <p style="text-align: center;">Desktop (Tablet) Hardware/Software: Scratch <b>Creating a video game</b></p>	<p style="text-align: center;"><u>Programming quizzes</u></p> <p style="text-align: center;">Desktop Hardware/Software: Scratch <b>Using the concept of 'Selection' (if then or) to program a quiz Ipads/ScratchJr</b></p>	<p style="text-align: center;"><u>Programming- sensing</u></p> <p style="text-align: center;">Desktop (Tablet) Hardware/Software: <b>micro:bits</b> <b>To program a range of algorithms that can accept inputs</b></p>



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