



EYFS / Key Stage One

	EYFS	Year 1	Year 2
Information Technology	<p><b>Computer Discovery</b> Introduce EYFS pupils to computer – Labelling computer parts. – Song lyrics to help understand and remember what computer parts do.</p> <p><b>Mouse and Keyboard Skills</b> 1. Move the mouse or trackpad and left click to select an object. 2. Drag and drop with mouse or trackpad to move objects around the screen. 3. Find letters or numbers on a keyboard. 4. Begin touch typing with home row keys.</p> <p><b>Digital Photos and Video</b> Children take and editing digital photos and videos. Ideas on how to bring photos to life with animation and augmented reality.</p> <p><b>Early Digital Music</b> Explore how sounds can be changed Explore different sounds of instruments They select and use technology for a particular purpose Represent own ideas through music</p> <p><b>Digital Art and Design</b> Painting, colouring and design clothes, robots and treehouses Uses simple tools and techniques competently and appropriately Selects appropriate resources and adapts them where necessary Explores how colours can be changed Chooses particularly colours to use for a purpose</p>	<p><b>Mouse &amp; Keyboard Skills</b> 1. Move the mouse or trackpad and left click to select an object. 2. Drag and drop with mouse or trackpad to move objects around the screen. 3. Find letters or numbers on a keyboard. 4. Begin touch typing with home row keys.</p> <p><i>NC: Use technology purposefully to create digital content.</i></p> <p><b>Digital Art</b> 1. Change the colour of individual pixels to accurately re-create basic artwork. 2. Make changes where required. 3. Change the colour of individual pixels to accurately re-create detailed artwork.</p> <p><i>NC: Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</i></p> <p><b>Design</b> 1. Change the colour and pattern of elements. 2. Position and rotate objects on a design. 3. Position objects in relation to each other. 4. Resize, rotate, flip and arrange objects behind/in front of each other.</p> <p><b>Text and Images</b> 1. Change the background colour of a page. 2. Add, resize and position images (pictures) on a page. 3. Type and position text on a page, if possible using capital letters and punctuation. 4. Label pictures with text. 5. Use word-banks for writing sentences about pictures.</p> <p><b>Comic Creation</b> 1. Add, resize and organise colour or picture backgrounds. 2. Add, resize, organise characters/object to different panels. 3. Add narration using text and direct speech using speech bubbles.</p> <p><b>Music Creation</b> 1. Create a rhythm using a pattern of beats. 2. Create digital sounds using patterns and shapes. 3. Create a simple melody using patterns and adjust tempo.</p>	<p><i>NC: Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</i></p> <p><b>Digital Art</b> 1. Use lines and fill tools to make interesting patterns. 2. Add a variety of shapes (outlines and fill) and label them with text. 3. Re-create graphics using pixels with different colours.</p> <p><b>Introduction to Animation</b> 1. Add a background and objects to a frame (including text) 2. Copy/clone a frame and move objects to create an animation, including flipping objects. 3. Create an animation with multiple objects moving simultaneously. 4. Create screen-recording animation (<i>optional, requires iPad</i>). 5. Create stop-motion animation with photos (<i>optional, requires iPad</i>). 6. Create animated drawings of characters by cropping photos and adjusting points of movement.</p> <p><b>Introduce Data Handling</b> – Understand what data is and collect it as a tally. – Use software to label a pictogram and add data to each column. – Edit a table with correct titles and numbers. – Use software to create a bar chart/pie chart/line chart suitable for the data. – Interpret a pictogram/bar chart/line chart.</p> <p><b>Ebook Creation</b> 1. Add a book cover with title, author, colour and image. 2. Add multiple pages based on a theme. 3. Add text on different pages. 4. Add images on different pages to match the theme/text. 5. Add voice recordings to match the text and theme.</p>



<b>Computer Science</b>	<p><b>Early Programming</b>            Programmable toys, unplugged activities and using code blocks to sequence instructions. Knows how to operate simple equipment            Give explanations</p> <p><b>Sequence code to write a simple program</b>            Maths and sequencing skills</p>	<p><i>NC: Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.            Create and debug simple programs.            Use logical reasoning to predict the behaviour of simple programs.</i></p> <p><b>Introduce Programming</b></p> <ol style="list-style-type: none"> <li>1. Place instructions into the correct order (sequence) to make something work.</li> <li>2. Use direction arrows to move an on-screen object (character/sprite) to achieve an objective.</li> <li>3. Predict a route and sequence direction commands (algorithm) to achieve an objective. Correct the errors if necessary (debug).</li> <li>4. Predict a route and sequence distance commands to program an on-screen object to achieve an objective.</li> <li>5. Predict and sequence movement and pen commands to program the drawing of different 2D shapes.</li> <li>6. Sequence code blocks, including movements and execute (start program) blocks to write a program to achieve an objective.</li> </ol>	<p><i>NC: Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.            Create and debug simple programs.</i></p> <p><b>Develop Programming</b>  <i>Use logical reasoning to predict the behaviour of simple programs.</i></p> <ol style="list-style-type: none"> <li>1. Create and debug simple programs by selecting code blocks, placing them in the correct sequence and executing a program.</li> <li>2. Use logical reasoning to predict the behaviour of simple programs.</li> <li>3. Simplify a program by using a loop.</li> </ol> <p><i>NC: Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.            Create and debug simple programs.            Use logical reasoning to predict the behaviour of simple programs.</i></p> <p><b>Programming with Scratch Jr</b></p> <ol style="list-style-type: none"> <li>1. Program movements.</li> <li>2. Program outputs for audio or text.</li> <li>3. Find errors in a program.</li> <li>4. Program inputs.</li> <li>5. Program selection/conditions (if one sprite hits another).</li> </ol>
<b>Digital Literacy</b>	<p><b>Digital Literacy and Numeracy</b></p> <ul style="list-style-type: none"> <li>- Typing</li> <li>- Phonics</li> <li>- Writing and digital storytelling</li> <li>- Maths activities by skill.</li> </ul> <p><b>Digital Photos and videos</b>            Taking photo and videos            Using Photos and Videos            Knows how to operate simple equipment            Choose particular colours for a purpose            Communication and Language            Writing</p> <p><b>E-Safety</b>            Using the Internet – the perils and opportunities</p>	<p><i>NC: Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</i></p> <p><b>E-Safety</b></p> <ol style="list-style-type: none"> <li>1. Understand what the internet is and how people use it.</li> <li>2. Understand what personal information is and why we keep personal information private.</li> <li>3. Why do websites want personal information.</li> <li>4. Identify when and where to go for help when concerned.</li> </ol>	<p><i>NC: Recognise common uses of information technology beyond school.</i></p> <p><b>Recognise uses of IT</b></p> <ol style="list-style-type: none"> <li>1. Understand what makes a computer a computer.</li> <li>2. Understand computers store and follow instructions.</li> <li>3. Spot digital technology in school.</li> <li>4. Understand how different technology helps us.</li> </ol> <p><i>NC: Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</i></p> <p><b>E-Safety</b></p> <ol style="list-style-type: none"> <li>1. What are the dangers of sharing photos online?</li> <li>2. People online are not always who they say they are.</li> <li>3. Trusting information online.</li> <li>4. Using the Internet responsibly.</li> <li>5. Being respectful.</li> </ol> <p><b>Internet Research</b></p> <ol style="list-style-type: none"> <li>1. Understand how a web-page displays information in different ways; text, images, videos and interactive elements.</li> <li>2. Use a web-page to answer questions.</li> </ol>