



# Meadow Primary School Progression Map



## Subject: Computing

Intent: In Computing we intend to teach the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. We will build on this knowledge and understanding so that pupils use information technology to create programs, systems and a range of content. We will focus on being safe whilst working in a digital environment and understand the digital footprint we leave. The curriculum will develop pupil's digital literacy – so that they able to use, and express themselves at a level suitable for the future workplace and as active participants in a digital world.

Autumn	EYFS	Key Stage 1		Key Stage 2			
	Year R	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Knowledge	Busy Things/ Internet Safety  Mouse control  Keyboard skills	Microsoft Word Document /Busy Things Data Handling  How to be safe online	Microsoft Word Use technology purposefully to create, organise, store, manipulate and retrieve digital content  Online safety Colour Magic – creating images using the tools available on this simple paint tool (Cross curricular – Muck, Mess and Mixtures topic)	Internet Safety Use technology safely, respectfully and responsibly; recognise acceptable/unaccept able behaviour; identify a range of ways to report concerns about content and contact.  Excel – spreadsheets	How to be safe online  Search engines PowerPoint Word  Algorithms Logo	Databases Information Workshop  How to be safe online Microsoft Word  Learn how be safe when using social media	Microsoft Excel  Using formulae to complete calculations.  Using spreadsheets to solve problems.
Skills	Completes a simple program on a computer. Uses ICT hardware to interact with age- appropriate computer software.	Turning computer on/off Logging on/off Keyboard skills Mouse skills Locating letters and numbers Collecting data Transfer data onto a pictogram	Word - Open a new document and add text. Manipulate the size, colour and text type. Edit a document and save. Colour Magic Drawing an image using different pens, brushes, colours, lines Adding text and moving it around on the screen. Saving and printing.	Using simple formulae.  Creating tables  Using spreadsheets to show data.	Learning how to set up a personal folder. Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts Use sequence, selection, and repetition in programs; work with variables and various forms of input and output	Using the OR search function to refine a search. Make more complex searches databases according to given criteria to displaying/ editing data and creating graphs. Recap key skills in Microsoft word art - font, inserting pictures from internet/clipart.	Using SUM formulae. Formatting cells, ordering/ editing/ presenting data. Using prior knowledge to create a functional spreadsheet for a specific purpose.

Spring	EYFS	Key Stage 1		Key Stage 2			
	Year R	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Knowledge	<p>Microsoft Word/ Internet Safety</p> <p>Keyboard skills</p> <p>Typing</p> <p>Editing</p>	<p>Beebots, Coding &amp; Creating a picture and adding text on Busy Things program</p>	<p>Scratch Understand that commands are used to make something happen.</p> <p>Understand that computers require code</p> <p>Animation Understand that technology can be used in different ways.</p>	<p>PowerPoint</p> <p>Binary Spreadsheets select, use and combine a variety of software (including internet services)</p>	<p>Branching database</p> <p>Flexi-tree Internet</p> <p>PowerPoint</p>	<p>How to be safe online</p> <p>Revelation natural art</p> <p>Spreadsheets Microsoft excel</p>	<p>Scratch</p> <p>Designing, writing and debugging programs that accomplish specific goals.</p> <p>Including controlling or simulating physical systems in a sprite.</p>
Skills	<p>Completes a simple program on a computer. Uses ICT hardware to interact with age-appropriate computer software.</p>	<p>Directional language Using/directing beebots Instructions using directional language</p> <p>Keyboard and typing skills Mouse Skills Locating letters/numbers Using text tool on busy things Use add picture tool</p>	<p>Use the scratch program to write simple instructions and find out what happens.</p> <p>Look at how to debug algorithms to find where <b>script</b> is incorrect.</p> <p>Gaining familiarity with how iPads can be used to create animations.</p>	<p>Formatting slides Inserting texts and pictures Adding transitions.</p> <p>On a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p>	<p>Explain how computers can be used to sort and group information/data</p> <p>Enter data and create questions to sort through the data</p> <p>Formatting slides Inserting texts and pictures Adding transitions.</p>	<p>Investigate different tools to produce a variety of pictures. This includes different brush strokes, effects and textures to develop perspective.</p> <p>To use formulae to make calculations and to input data into a spreadsheet for a specific outcome.</p>	<p>Programming, debugging, creating animations, controlling time/objects, sequencing events in a story, adding sound and adding an interactive user.</p>

Summer	EYFS	Key Stage 1		Key Stage 2			
	Year R	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Knowledge	<p>Beebots/ Internet Safety</p> <p>Programming</p>	<p>Creating and Sending Emails</p> <p>Features of emails</p> <p>Digital pictures on paint software</p>	<p>Using search engines to research</p> <p>Keeping safe online</p> <p>Online research.</p>	<p>Data Handling</p> <p>How to present data in an computer program</p> <p>Scratch</p> <p>Understand that commands are used to make something happen.</p> <p>Understand that computers require code.</p>	<p>Simulations of real life events</p> <p>Scratch</p>	<p>How to be safe online</p> <p>Kodu</p> <p>How to write and create algorithms to create a computer world</p>	<p>Power point</p> <p>Presenting information in an appropriate and appealing way for an audience.</p> <p>Publisher</p> <p>To create a memory book on Microsoft Publisher.</p>
Skills	<p>Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.</p>	<p>Logging on to emails</p> <p>Keyboard skills to type an email</p> <p>Identifying features of an email e.g. send, reply.</p> <p>Locate and use text, picture, paintbrush, colour and shape tool.</p> <p>Take picture using camera</p>	<p>Learning how to get results on a search engine</p> <p>PowerPoint</p> <p>I can safely search the internet and find information and pictures on a topic.</p>	<p>Collecting and presenting data</p> <p>Use the scratch program to write simple instructions and find out what happens.</p> <p>Look at how to debug algorithms to find where <b>script</b> is incorrect.</p>	<p>Children consider the advantages of modelling using simulations and critically consider how realistic the simulations are</p> <p>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p>	<p>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p> <p>Design a simulation world</p> <p>Control a character to move</p> <p>Debug and improve issues within the created world</p> <p>Develop a game</p>	<p>PowerPoint</p> <p>Researching information, copying/pasting, inserting pictures, animations, transitions and formatting slides/texts/ pictures.</p> <p>Publisher</p> <p>Creating a publication.</p> <p>Inserting text and pictures – changing/editing this.</p> <p>Formatting background style and pictures. Systematic and effective planning. A clear plan that is detailed and labeled, with every element of the page being considered. Creating and renaming new folders. Saving pictures from the internet. Creating a publication.</p> <p>Inserting text and pictures.</p> <p>Formatting back grounds.</p> <p>Formatting text and pictures.</p> <p>Considering and creating an effective design. Independently trouble shooting any problems that may arise. Presenting and discussing your own project.</p> <p>Being able to give constructive and effective evaluations to peers that is helpful and useful.</p>

## Impact (End Points)

EYFS	Key Stage 1		Key Stage 2			
Year R	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes. Children can use the keyboard and mouse. Children can access an app.</p>	<p>Children should be able to confidently log in and use a range of technology/programs e.g. Beebots, computer, camera. They use different technology/programs appropriately to type, locate, identify and create.</p>	<p>Children create simple pictures increasing my mouse skills They know how to stay safe when working online. Children can understand how code moves a sprite and how to write an algorithm for movement.</p>	<p>Children demonstrate a safe use of the Internet, awareness of privacy. Competent use of Excel spreadsheets, word documents and editing. Accomplished at collecting, analysing, evaluating, presenting data and information. Understanding of Binary.</p>	<p>Children should be confident in using the internet safely (search engines) and who to report concerns to. Understand the meaning of algorithms and how they work, detecting and correcting simple errors.</p>	<p>Children will know how to use a variety of different programs to achieve a desired outcome. They will be able to identify and debug algorithms in order to create a game using Kodu. Children will be able to use spreadsheets to collect and calculate data and present it in a variety of ways. They know how to stay safe online and how to behave responsibly online.</p>	<p>Children are able to use logical reasoning to explain how simple algorithms work in different programs and be able to apply their knowledge and understanding. Children should be able to use search technologies effectively and independently. Children should be able to understand computer networks, including the internet and be able to use them safely, respectfully and responsibly.</p>