



# Computing Progression of Skills

At Kingfisher we believe in ensuring children have the basic and everyday computing skills as well as ensuring the ICT curriculum is covered. In order to do this, we have created a progression of skills that mixes the national curriculum statements and the skills children need for using technology in their everyday lives. Computing is split into five different categories: E-safety, Programming, Multimedia, Technology in Our Lives and Data Handling.

	FS2	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Basic Skills</b> Autumn	<ul style="list-style-type: none"> <li>– Mouse Control</li> <li>– Begin to use the keyboard</li> </ul>	<ul style="list-style-type: none"> <li>– Log on to the computer and select specific programmes.</li> <li>– Use a simple search engine</li> <li>– Open programmes on the computer</li> </ul>	<ul style="list-style-type: none"> <li>– Copy and Paste images</li> <li>– Know how to use 'Return/Enter', 'Shift' and 'Caps Lock'.</li> <li>– Save a document</li> </ul>	<ul style="list-style-type: none"> <li>– Use 'Shift' key to type characters</li> <li>– Highlight text to copy and paste or delete selected</li> <li>– Save a document into a specified area</li> </ul>	<ul style="list-style-type: none"> <li>– Use spell check</li> <li>– Keyboard shortcuts</li> <li>– Cyber footprints</li> </ul>	<ul style="list-style-type: none"> <li>– How to transfer photos and files.</li> <li>– Carry out complex searches (using and/or)</li> <li>– Basic Publisher skills</li> </ul>	<ul style="list-style-type: none"> <li>– Choosing the most appropriate software for a given task.</li> <li>– Basic Excel skills</li> </ul>
<b>Programming</b> Autumn	<ul style="list-style-type: none"> <li>– Press buttons on a floor robot and talk about the movements</li> <li>– Use simple software to make things happen</li> </ul>	<ul style="list-style-type: none"> <li>– Physically follow &amp; give instructions to move around.</li> <li>– Explore outcomes when buttons are pressed on a robot.</li> <li>– Use the word 'debug' to correct any mistakes when programming.</li> <li>– Begin to predict what will happen within a short sequence of instructions.</li> </ul>	<ul style="list-style-type: none"> <li>– Physically follow &amp; give specific instructions (maze).</li> <li>– Plan and enter a sequence of instructions to achieve an algorithm with a robot.</li> <li>– Use a Logo program to execute and debug problems.</li> <li>– Talk about what is the same and different about floor and on screen robots</li> </ul>	<ul style="list-style-type: none"> <li>– Plan and enter a sequence of instructions on a robot to achieve a specific outcome.</li> <li>– If a problem arises, debug the sequence.</li> <li>– Solve open-ended problems with a floor robot &amp; Logo.</li> <li>– Sequence pre-written lines of programmes into order</li> <li>– Talk about algorithms planned by others.</li> </ul>	<ul style="list-style-type: none"> <li>– Identify bugs in programmes written by others.</li> <li>– Use an algorithm to sequence more complex programme in order.</li> <li>– Link the use of algorithms to solve problems in Maths, Science, DT.</li> </ul>	<ul style="list-style-type: none"> <li>– Explore procedures using repeat to achieve solutions.</li> <li>– Group commands as a procedure to achieve a specific outcome within a programme.</li> <li>– Talk about procedures as parts of a programme.</li> <li>– Change inputs on a model to achieve different outputs.</li> </ul>	<ul style="list-style-type: none"> <li>– Understand how sensors can be used to activate a procedure or sequence.</li> <li>– Create variables to provide a score or trigger an action in a game.</li> </ul>

<p>Multimedia Spring</p>	<ul style="list-style-type: none"> <li>- Rearrange objects and pictures.</li> <li>- Recognise text, sound and images.</li> <li>- Use a camera or sound recorder.</li> <li>- Use paint to create pictures</li> </ul>	<ul style="list-style-type: none"> <li>- Record their own voices and playback to an audience.</li> <li>- Use video or stills to record.</li> <li>- Create sounds and simple music.</li> <li>- Add text and images to a document.</li> </ul>	<ul style="list-style-type: none"> <li>- Use paint to use a variety of tools and talk about choices.</li> <li>- Make electronic books using templates</li> <li>- Create documents adding text and images.</li> </ul>	<ul style="list-style-type: none"> <li>- Create and begin to edit presentations</li> <li>- Create musical phrases using ICT.</li> <li>- Explore the use of video, animation &amp; green screening.</li> <li>- Develop a storyboard and then create a simple animation (stop animation).</li> <li>- Create e-books, brochure and posters</li> </ul>	<ul style="list-style-type: none"> <li>- Confidently create and modify video and presentations.</li> <li>- Create music phrases for specific purposes.</li> <li>- Use font sizes and bullet points effectively.</li> <li>- Independently create a stop animation video, understanding process.</li> <li>- Create e-books, brochure and posters</li> </ul>	<ul style="list-style-type: none"> <li>- Explore the effects of multimedia in presentation or video</li> <li>- Use transitions and hyperlinks in presentations.</li> <li>- Know how to use text and video editing.</li> <li>- Create structured documents (e-book, brochure, poster) for a given subject using a range of media</li> </ul>	<ul style="list-style-type: none"> <li>- Discuss audience, atmosphere and structure of presentation and video.</li> <li>- Collect information and media to use in a presentation.</li> <li>- Create structured documents (e-book, brochure, poster).</li> <li>- Use sound, images, text, transitions, hyperlinks effectively in presentations.</li> <li>- Evaluate own and others work.</li> </ul>
<p>Technology in Our Lives Spring/Summer</p>	<ul style="list-style-type: none"> <li>- Recognise when technology is used in our lives.</li> <li>- Recognise that you can use the internet to play and learn.</li> <li>- Understand that things they create belong to them and can be shared with others using technology.</li> </ul>	<ul style="list-style-type: none"> <li>- Recognise uses of technology in their homes and in their community.</li> <li>- Understand that there are online tools that can help them create and communicate</li> </ul>	<ul style="list-style-type: none"> <li>- Begin to understand and recognise differences in a variety of sources of information.</li> <li>- Understand what the internet is and what it is used for.</li> <li>- Recognise that some online content may or may not be true.</li> </ul>	<ul style="list-style-type: none"> <li>- Talk about the parts of a computer.</li> <li>- Use appropriate tools to collaborate and communicate online.</li> <li>- Understand the ownership of information online.</li> </ul>	<ul style="list-style-type: none"> <li>- Talk about the school network.</li> <li>- Discuss different resources they can access, including the Internet.</li> <li>- Consider reliability of information.</li> <li>- Check owner before copying photos, clipart or text.</li> <li>- E-mailing and blogs</li> </ul>	<ul style="list-style-type: none"> <li>- Identify different parts of computing devices.</li> <li>- Identify different parts of the Internet.</li> <li>- Talk about the different elements on web pages.</li> <li>- Use effective strategies to use search engines</li> <li>- Choose appropriate ways to collaborate and communicate online.</li> </ul>	<ul style="list-style-type: none"> <li>- Describe services provided by the Internet &amp; how this moves around.</li> <li>- Connect a device to a keyboard, mouse or printer.</li> <li>- Describe different parts of a computing device &amp; how it connects to the Internet.</li> <li>-</li> </ul>

<p style="text-align: center;"><b>Data Handling</b> Summer</p>	<ul style="list-style-type: none"> <li>- Collect information as photos or sound.</li> <li>- Use simple pictogram or photos to count and organise.</li> </ul>	<ul style="list-style-type: none"> <li>- Take photos, video and record sound to record learning.</li> <li>- Look at how data is represented digitally.</li> <li>- Contribute to and interpret a pictogram.</li> </ul>	<ul style="list-style-type: none"> <li>- Collect data, generate graphs and chart to find answers.</li> <li>- Use paper/object to explore a branching database.</li> <li>- Investigate different types of digital data.</li> </ul>	<ul style="list-style-type: none"> <li>- Use pre-prepared databases.</li> <li>- Contribute towards a database</li> <li>- Construct and use a branching database.</li> <li>- Record data in a variety of ways.</li> <li>- Use a data logger to monitor changes.</li> </ul>	<ul style="list-style-type: none"> <li>- Identify different types of database.</li> <li>- Plan and create a database to answer questions.</li> <li>- Present data in appropriate formats.</li> <li>- Use a data logger to record and compare individual readings.</li> </ul>	<ul style="list-style-type: none"> <li>- Collect and record information using spreadsheets and databases.</li> <li>- Analyse information and question data.</li> <li>- Identify poor quality data.</li> <li>- Select appropriate use of a data logger for an investigation and interpret data.</li> </ul>	<ul style="list-style-type: none"> <li>- Use the whole data process (generate, process, interpret, store, present)</li> <li>- Select appropriate data tools.</li> <li>- Identify and present results.</li> <li>- Refine searches to provide answers.</li> <li>- Plan investigations using the outcomes from a data logger.</li> </ul>
<p style="text-align: center;"><b>E-Safety</b> First week of each half term.</p>	<ul style="list-style-type: none"> <li>- Talk about good and bad choices in real-life.</li> <li>- Play appropriate games on the internet.</li> <li>- Talk about good and bad choices when using websites.</li> </ul>	<ul style="list-style-type: none"> <li>- Understand that they need to follow rules when visiting sites online.</li> <li>- Understand that if you create something, you own it.</li> <li>- Learn that sites can ask for private information and discuss how to do this responsibly.</li> <li>- Recognise different devices can be used to connect people.</li> </ul>	<ul style="list-style-type: none"> <li>- Understand how to stay safe online by choosing sites, which are age-appropriate.</li> <li>- Explore cyber-bullying.</li> <li>- Understand that if they put information online, it leaves a digital footprint or "trail".</li> <li>- Understand how to search online effectively to get the best results.</li> <li>- Discuss criteria for deciding if a site is useful or not.</li> </ul>	<ul style="list-style-type: none"> <li>- Create sensible and appropriate rules to follow when using the internet.</li> <li>- Create a secure password.</li> <li>- Discuss what they should do if they do not feel safe online.</li> <li>- Talk about what online games they like playing and which games are good choices and why.</li> <li>- Understand their own digital footprint or "trail"</li> <li>- Question the validity of what they see on the internet</li> <li>- Recognise social networking sites and social networking built into other things (online games and consoles)</li> <li>- Begin to understand the purpose of copyright regulations.</li> </ul>		<ul style="list-style-type: none"> <li>- Create sensible and appropriate rules to follow when using the internet.</li> <li>- Discuss personal use of the internet and the choices they make.</li> <li>- Discuss how you would protect yourself from different virus threats.</li> <li>- Explore the safe a responsible use of online communication.</li> <li>- Understand their own digital footprint or "trail"</li> <li>- Explore social media including the legalities of such sites and apps (e.g. Facebook, Snapchat etc).</li> <li>- Act as a role model online for younger pupils.</li> </ul>	