



Be a computing expert!

Computing Curriculum – Intent and Implementation

At Church Hill Infant School we recognise the importance of technology and how it is always evolving. We understand how technology plays a big part in children's lives and how we must keep adapting our teaching to suit the ever-changing world of technology. Our Computing curriculum allows children to learn key skills in coding, word processing, photography and basic computer skills. Technology is introduced in the foundation stage through exploring and play. These experiences are then built upon in the next two years where children are taught more specific skills with a focus on the year group topic. Many Computing lessons are woven with other subjects to maximise learning opportunities. We are a school that is proud to have an award for e-safety and we recognise the huge importance of educating children to be confident with using technology safely. We want children to know what some of the risks are and what to do if they do come across a difficult situation. We ensure e-safety is taught regularly through assemblies, celebrating safer internet day and informing our parents of the latest updates.

Oracy

It is key that our young learners are able to communicate well with their classmates. In computing teamwork is vital and children require the skills to be able to talk to their partner in order to work together successfully. There is a lot of subject specific vocabulary in computing and it is important that children can use these words in the correct context. Computing requires a lot of trial and error and having the ability to discuss what has worked well and what has not worked will support them to become a computing expert.

Coding - skills and knowledge

EYFS	Year 1	Year 2
<p>Reception Show resilience and perseverance in the face of a challenge.</p> <p>ELG Be confident to try new activities and show independence, resilience and perseverance in the face of challenges.</p> <p>I know that when I press something there will be a reaction to it.</p> <p>I know how to programme simple instructions into a robot.</p>	<p>Understand what algorithms are and how they are implemented on digital devices.</p> <p>I can plan a simple program.</p> <p>To create more than one program for the same route.</p> <p>I know what an algorithm is.</p> <p>I know how to program a robot correctly giving it more than one instruction.</p> <p>I know the correct order of commands in my algorithm.</p> <p>I know that there is more than one possible route a robot can take.</p>	<p>Use logical reasoning to predict the behaviour of simple programs.</p> <p>Understand that I can use the same commands but in a different sequence to create a new algorithm.</p> <p>Create and debug simple programs.</p> <p>I know where a robot will end up after following a series of instructions.</p> <p>I know if my instructions have been successful or unsuccessful.</p> <p>I know how to make changes to my instructions if they are incorrect.</p> <p>I know I can create different algorithms using the same commands.</p>
<p>Robot, press, button, forwards and backwards, turn, instruction.</p>	<p>Left and right, algorithm, program, command, sequence, solution and problem, route.</p>	<p>Predict, debug, ambiguous, unambiguous, successful and unsuccessful, series.</p>

Using a computer - skills and knowledge

EYFS	Year 1	Year 2
<p>3 and 4 year olds Explore how things work Match their developing physical skills to task and activities in the setting.</p> <p>Reception Show resilience and perseverance in the face of a challenge. Develop small motor skills so they can use tools competently, safely and confidently. Explore, use and refine a variety of artistic effects to express ideas and feelings</p> <p>ELG Safely use and explore a variety of tools and techniques, experimenting with design and function.</p> <p>I know how to hold a tablet correctly.</p> <p>I know how to navigate a tablet successfully.</p> <p>I know how to explore various apps and programmes.</p>	<p>Recognise common uses of information technology in the home and school environment.</p> <p>Use technology purposefully to create digital content.</p> <p>I can use a keyboard to type effectively.</p> <p>I can save my work and then open it from its saved location.</p> <p>I can use different tools to create digital art. E.g size of brush, fill and shapes</p> <p>I know where the letters and common punctuation marks are on a keyboard.</p> <p>I know that my work can be saved as a file.</p> <p>I know how to locate my work and edit it.</p> <p>I know how to find and use a variety of appropriate tools.</p>	<p>Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p> <p>Understand how technology can help us at home and at school.</p> <p>I understand what makes a good digital photograph. E.g orientation, lighting, distance</p> <p>I understand that I can use tools to edit a digital photograph.</p> <p>I can explain how a photograph could be improved.</p> <p>I know that people use technology at work and at home.</p> <p>I know that there are different apps and programmes that I can use to create digital content. E.g PicCollage</p> <p>I know what devices take photographs and which ones don't.</p> <p>I know how to take a good photograph using a digital device.</p> <p>I know how to edit a digital photograph using tools e.g filters.</p>
<p>Tablet, home screen, explore, app, press, button, volume</p>	<p>Save, open, tools, edit, file, type, keyboard, computer, digital</p>	<p>Portrait, landscape, flash, filter, digital photograph, improve, device, focus, framing</p>

Be an E-safety expert- skills and knowledge

EYFS	Year 1	Year 2
<p>3 and 4 year olds Remember rules without needing an adult to remind them.</p> <p>Reception Know about sensible amounts of 'screen time'</p> <p>ELG Explain the reasons for rules, know right from wrong and try to behave accordingly.</p> <p>I know that I should only be online with an adult present.</p> <p>I know that I can speak to an adult if I see something I don't like online.</p> <p>I know that I should only use a screen for a certain amount of time.</p>	<p>Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies.</p> <p>Understand what my personal details are e.g name, address, phone number and photograph.</p> <p>Understand that not all content and games are appropriate for children.</p> <p>I know that I must not share my personal details and my own photograph online.</p> <p>I know that I can turn my screen off and talk to an adult when I come across inappropriate content.</p> <p>I know that I must ask an adult if I want to download or play on a new game.</p>	<p>Use technology safely and keep personal information private.</p> <p>Understand that not everything/everyone online is honest.</p> <p>Start to understand that I have a digital footprint.</p> <p>Understand what a computer virus means and that some files may contain them.</p> <p>I know that somethings that I see or read online might not be true.</p> <p>I must not meet up with someone I have met online as they might not be who they say they are.</p> <p>I know that I must ask permission before taking a digital photograph.</p> <p>I know that everything I do online is remembered.</p> <p>I must not accept a file online without speaking to an adult first.</p>
Online, adult, screen time, safely.	Appropriate, download, personal details, inappropriate, games, permission	Accept, virus, honest, private, digital footprint