

# KS1 Computing Core Skills



Behaviour	Attitude	Skills	Knowledge	Experience	Technology	Sustained
<p>Children will begin to question how things work</p> <p>Children will work independently, in pairs and in groups, being able to share their ideas effectively</p>	<p>Children know there are different ways to solve a problem</p> <p>They can identify patterns</p> <p>They experiment through making, testing and evaluating</p>	<p>Children can create and debug (find and remove errors from) simple computer programs.</p> <p>They can use logical reasoning to predict the behaviour of simple programs.</p> <p>They can use technology to create, organise, store, manipulate and retrieve digital content.</p> <p>They recognise common uses of information technology in the wider world.</p>	<p><b>Computer Science</b> Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</p> <p>Create and debug simple programs</p> <p>Use logical reasoning to predict the behaviour of simple programs</p> <p><b>Information Technology</b> Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> <p><b>Digital Literacy</b> Recognise common uses of information technology beyond school</p> <p>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.</p>	<p>Safer Internet Day</p> <p>Making online safety posters</p>	<p>iPads and apps</p> <p>Websites</p> <p>Search Engines</p> <p>Cameras</p> <p>Beebots</p> <p>Paint</p>	<p>They can log in and out and saving work on their own account</p> <p>They understand the importance of a password</p> <p>When using the internet to search for images, they know what to do if they come across something online that worries them or makes them feel uncomfortable</p> <p>They recognise when someone has been unkind online</p> <p>They understand that personal information should not be shared on the internet.</p> <p>They are respectful to others when sharing content online.</p>

# LKS2 Computing Core Skills



Behaviour	Attitude	Skills	Knowledge	Experience	Technology	Sustained
<p>Children will question how things work</p> <p>Children will work together, supporting one another in their learning</p> <p>Children will become confident to work and problem solve independently.</p> <p>Children will contribute useful ideas to a partner or group</p>	<p>Children know there can be more than one way to solve a problem</p> <p>They can identify patterns in problems and solutions</p> <p>They experiment through making, testing and evaluating</p>	<p>Children will be able to predict and analyse results</p> <p>Be able to spot and use similarities</p> <p>They know how to evaluate.</p> <p>They will solve problems by breaking them down into smaller parts and develop other ways to help them problem-solve.</p> <p>Children should be actively engaged in their learning – typically this will be doing something on a computer, but it could also be taking part in a discussion or an activity away from the computer, such as role-play.</p> <p>They should have some degree of choice over how they tackle a task or project, or perhaps even over the task or project itself.</p> <p>Children will work together, supporting one another in their learning</p>	<p><b>Computer Science</b> 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 sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p>Understand computer networks including the internet; how they can provide multiple services, such as the world wide web</p> <p>Appreciate how (search) results are selected and ranked</p> <p><b>Information Technology</b> Use search technologies effectively</p> <p>Select, use and combine a variety of software (including internet services) 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><b>Digital Literacy</b></p> <p>Understand the opportunities (networks) offer for communication and collaboration.</p> <p>Be discerning in evaluating digital content Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>	<p>Safer Internet Day</p> <p>Making online safety posters</p> <p>iPad Agreement</p>	<p>iPads and apps -Book Creator</p> <p>Websites: -Code.org -Search engines i.e. Google -YouTube</p> <p>Cameras</p> <p>Computer Games</p> <p>X-Ray Goggles</p> <p>Stop Motion Animation</p> <p>PowerPoint</p>	<p>They know how to be a responsible digital citizen</p> <p>They understand their responsibilities to treat others respectfully and recognise when digital behaviour is unkind</p> <p>They understand about cyberbullying</p> <p>They know that not all information on the internet is factual</p> <p>They understand who personal information should/ should not be shared with</p>

# UKS2 Computing Core Skills



Behaviour	Attitude	Skills	Knowledge	Experience	Technology	Sustained
<p>Children will question how things work</p> <p>Children will work together, supporting one another in their learning</p> <p>Children will become confident to work and problem solve independently.</p> <p>Children will contribute useful ideas to a partner or group</p>	<p>Children learn from setbacks and don't let it put them off.</p> <p>They can describe how a project could be extended</p> <p>They can identify patterns in problems and solutions</p> <p>They experiment through repeatedly making, testing and evaluating</p>	<p>Children will be able to predict and analyse results</p> <p>Be able to spot and use similarities</p> <p>They know how to evaluate.</p> <p>They will solve problems by breaking them down into smaller parts and develop other ways to help them problem solve.</p> <p>Children can adapt existing problems to solve new ideas</p> <p>Children should be actively engaged in their learning – typically this will be doing something on a computer, but it could also be taking part in a discussion or an activity away from the computer, such as role-play.</p> <p>They should have some degree of choice over how they tackle a task or project, or perhaps even over the task or project itself.</p> <p>Children will work together, supporting one another in their learning</p>	<p><b>Computer Science</b> 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 sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p>Understand computer networks including the internet; how they can provide multiple services, such as the world wide web</p> <p>Appreciate how (search) results are selected and ranked</p> <p><b>Information Technology</b> Use search technologies effectively Select, use and combine a variety of software (including internet services) 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><b>Digital Literacy</b> Understand the opportunities (networks) offer for communication and collaboration. Be discerning in evaluating digital content</p> <p>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>	<p>BETT Show</p> <p>Safer Internet Day</p> <p>Digital Leaders</p> <p>iPad Agreement</p> <p>Making online safety posters</p>	<p>iPads and apps</p> <p>Websites: -Code.org -Search engines i.e. Google YouTube</p> <p>Cameras</p> <p>Computer games</p> <p>Scratch</p> <p>Kodu</p> <p>Raspberry Pi</p> <p>X-Ray Goggles</p> <p>Stop Motion Animation</p> <p>PowerPoint</p>	<p>They understand about how permissions work and how to change them</p> <p>They can identify possible issues with online communication</p> <p>They can consider the effects of screen-time on physical and mental wellbeing</p> <p>They understand about online bullying and where to seek advice</p> <p>They understand the importance of secure passwords and how to create them, along with two-step authentication</p> <p>They can use search engines safely and effectively</p> <p>They recognise that updated software can help to prevent data corruption and hacking</p> <p>They consider their digital footprint and online reputation and future implications they may have</p>