

Level Expected at the End of EYFS

We have selected the most relevant statements from Development Matters age ranges for Three and Four-Year-Olds and Reception as well as highlighting the statements within the ELGs which feed into the programme of study for computing.

For more detail about linked subject progression within the EYFS Framework, please refer to [these documents](#).

Computing			
Three and Four-Year-Olds	Personal, Social and Emotional Development		<ul style="list-style-type: none"> Remember rules without needing an adult to remind them.
	Physical Development		<ul style="list-style-type: none"> Match their developing physical skills to tasks and activities in the setting.
	Understanding the World		<ul style="list-style-type: none"> Explore how things work.
Reception	Personal, Social and Emotional Development		<ul style="list-style-type: none"> Show resilience and perseverance in the face of a challenge. Know and talk about the different factors that support their overall health and wellbeing: <ul style="list-style-type: none"> -sensible amounts of 'screen time'.
	Physical Development		<ul style="list-style-type: none"> Develop their small motor skills so that they can use a range of tools competently, safely and confidently.
	Expressive Arts and Design		<ul style="list-style-type: none"> Explore, use and refine a variety of artistic effects to express their ideas and feelings.
ELG	Personal, Social and Emotional Development	Managing Self	<ul style="list-style-type: none"> Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. Explain the reasons for rules, know right from wrong and try to behave accordingly.
	Expressive Arts and Design	Creating with Materials	<ul style="list-style-type: none"> Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.

Key Stage 1 National Curriculum Expectations	Key Stage 2 National Curriculum Expectations
<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> • 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; • use technology purposefully to create, organise, store, manipulate and retrieve digital content; • recognise common uses of information technology beyond school; • 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>Pupils should be taught to:</p> <ul style="list-style-type: none"> • 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; • use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs; • understand computer networks including the internet; how they can provide multiple services, such as the world wide web, and the opportunities they offer for communication and collaboration; • use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content; • 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; • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Intent

Everyone at Cookridge Primary school will be confident, enthusiastic and capable users of technology of the future based on a “hands on” and interactive approach to learning. Computing at Cookridge will be a vehicle in which to create, research and present information about the wider world. The children will become confident members of an ever-growing technological world.



Implementation

Cookridge Primary School will:

- Clearly document the skills progression throughout every primary phase. These will be displayed on the school website for all members of the school community to access.
- Provide Long Term plans outlining the intended teaching of computing knowledge and skills progression.
- Train staff to use the knowledge and skills progression document to plan and teach effectively, in order for children to be able to research, create and present information.
- Monitor the impact of its teaching of computing and look for successes and areas of development. We will do this using triangulation activities such as data collection, observations, pupil voice, work scrutiny, internal and external moderation and discussions with staff.
- Maintain opportunities for recapping previous learning.
- Give subject leaders time to monitor the impact of the computing curriculum taught on children’s learning and time for reporting to staff on areas for development.



Impact

- Use computing data to measure impact of computing implementation – performance of different groups e.g. PPG, Year groups, Gender
- Use triangulation activities to help evidence impact - observations, pupil voice, work scrutiny, internal and external moderation, impact on other areas of the curriculum and discussions with staff.
- We will know the children of focus by analysing triangulation activities which highlight those children who are struggling or are stuck.
- Is the subject Intent statement a reality? If not, why not?
- Create future actions based on Self-assessment of subject area.

	KS1	LKS2	UKS2
Computer Science	<p>Children begin to understand their influence on technology by developing their programming skills to determine output. They begin to understand that an algorithm is a series of steps for solving problems and a code is a series of steps that machines can execute. They begin to explore debugging, predicting when codes may not work and changing them.</p> <p>Children:</p> <ul style="list-style-type: none"> - KS1 CS1 - Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions. - KS1 CS2 – Create and debug simple programs. - KS1 CS3 - Use logical reasoning to predict the behaviour of simple programs. 	<p>Children build on their programming skills by solving problems and programming commands to achieve a specific outcome. They begin to write programs, explain algorithms and identify errors in their work.</p> <p>Children develop their skills of formatting using keyboard commands, organising their work to demonstrate effect. In LKS2, they will have the opportunity to express themselves more through digital technology, art, PowerPoint and posters. Children should continue to demonstrate control when operating tools as in KS1.</p> <p>Children:</p> <ul style="list-style-type: none"> - KS2 CS1 - Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; they solve problems by decomposing them into smaller parts. - KS2 CS2 - Use sequence, selection, and repetition in programs and work with variables and various forms of input and output. - KS2 CS3 - Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. - KS2 CS4 - Understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration. 	<p>Children build on their programming skills by using new systems such as a flowchart. They continue to break down problems and create algorithms to solve them. They are able to explain the outcome of an algorithm with confidence and accuracy.</p> <p>Children:</p> <ul style="list-style-type: none"> - KS2 CS1 - Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; they solve problems by decomposing them into smaller parts. - KS2 CS2 - Use sequence, selection, and repetition in programs and work with variables and various forms of input and output. - KS2 CS3 - Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. <p>KS2 CS4 - Understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration.</p>

Information Technology	<p>Children begin to understand the particular purposes technology can be used for and that by adding text and images you can communicate with technology. Children develop their skills in typing, selecting tools and organising information. Children begin to develop their creativity using technology through recording sound. Children will also begin to develop their editing skills and control of the tools.</p> <p>Children:</p> <ul style="list-style-type: none"> - KS1 IT1 - Use technology purposefully to create, organise, store, manipulate and retrieve digital content. 	<p>Children develop their editing skills further by cropping, organising and arranging film clips. They are able to share work and offer feedback and ideas for improvement with animation and film, giving their opinion on which software to use. In LKS2, children also look at the history of animation and reflect upon the changes over time.</p> <p>Children begin to explore expressing information in tables, sorting and organising information for others to be able to understand.</p> <p>Children:</p> <ul style="list-style-type: none"> - KS2 IT1 - Children use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. - KS2 IT2 - 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>Children begin to look at new software, creating 3D models and learning how to orbit, zoom and develop their editing skills further. They become more confident in inserting links, images and formatting text to create effect.</p> <p>Data Handling in UKS2 focuses on selecting the correct method to display data and using software such as spreadsheets. Children also learn how to check the accuracy of data and compare data for a specific purpose.</p> <p>Children:</p> <ul style="list-style-type: none"> - KS2 IT1 - Children use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. - KS2 IT2 - 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.
Digital Literacy	<p>Children can use technology safely and respectfully, keeping personal information private; they identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. Children begin to make links to how they use technology outside of the classroom. They begin to think about the benefits of using technology in their lives, making links to learning about online safety.</p> <p>Children:</p> <ul style="list-style-type: none"> - KS1 DL1 - Recognise common uses of technology beyond school. They use technology safely and respectfully, keeping personal information private; they identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. - KS1 DL2 - Children can use technology safely and respectfully, keeping personal information private; they identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. 	<p>Children refer to online safety rules when discussing technology in their lives. They are able to navigate between websites and use safe search terms on trusted search engines. They become more confident in using email for communication, including attaching and saving files from emails.</p> <p>Children:</p> <ul style="list-style-type: none"> - KS2 DL1 - Use technology safely, respectfully and responsibly; recognising acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. 	<p>Children can use safe search terms on trusted search engines, and evaluate websites based on layout and information. They become more confident in understanding Google rankings, adverts and the reliability of websites.</p> <p>Children:</p> <ul style="list-style-type: none"> - KS2 DL1 - Use technology safely, respectfully and responsibly; recognising acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

