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| <p>National Curriculum (2014)</p> <p style="text-align: center;">Coverage</p> <p>Teaching about people, events and changes</p> | <p style="text-align: center;">Key Stage 1</p> <p>The national curriculum for computing aims to ensure that all pupils:</p> <ul style="list-style-type: none"> can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems are responsible, competent, confident and creative users of information and communication technology. |
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Early Years Foundation Stage - The table below outlines the most relevant statements taken from the Early Learning Goals in the EYFS statutory framework and the Development Matters age ranges for Three and Four-Year-Olds and Reception to match the programme of study for computing.

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| 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 | 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: -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 | Explore, use and refine a variety of artistic effects to express their ideas and feelings. |
| ELG | Personal, Social and Emotional Development | <p style="text-align: center;">Managing Self</p> <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 | <p style="text-align: center;">Creating with Materials</p> <p>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</p> |



| | YEAR 1 | YEAR 2 |
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| <p>Computer Science 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> | <ul style="list-style-type: none"> I can explain that an algorithm is a set of instructions. I know that an algorithm written for a computer is called a program. I can work out what is wrong when the steps are out of order in instructions. I can say that if something does not work how it should it is because my code is incorrect. I can try and fix my code if it isn't working properly. I can make good guesses of what is going to happen in a program. | <ul style="list-style-type: none"> I can explain an algorithm is a set of instructions to complete a task. I know I need to carefully plan my algorithm so it will work when I make it into code. I can design a simple program that achieves a purpose. I can find and correct some errors in my program. I can say what will happen in a program. I can spot something in a program that has an action or effect (does something) |
| <p>Information Technology Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p> | <ul style="list-style-type: none"> I can sort sound, pictures and text. I can add sound, pictures and text to a program. I can change content on a file such as text, sound and images. I can name my work. I can save my work. I can find my work. | <ul style="list-style-type: none"> I can organise data. I can find data using specific searches. I can use several programs to organise information. I can edit digital data such as data in music composition software. I can name, save and find my work. I can include photos, text and sound in my creations. |
| <p>Digital Literacy 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> | <ul style="list-style-type: none"> I can say what technology is. I can say what examples of technology are in school. I can say what examples of technology are at home. I know that a chair uses old technology and a smart phone uses new technology. I can keep my login information safe. I can save my work in a safe place. | <ul style="list-style-type: none"> I can find information I need using a search engine. I know the consequences of not searching online safely. I can share work and communicate electronically. I can report unkind behaviour and things that upset me online, to a trusted adult. I can see where technology is used at school such as in the office or canteen. I understand that my creations need similar skills to the adult world. |



| National Curriculum (2014) | Key Stage 2 |
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| | <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. |