



Key Stage 1 and 2 Computing

Cycle A

	Autumn	Spring	Summer
Class 1	Exchanging and Sharing Information Understand that messages are conveyed by electronic means (telephone/email/Dojo)	Developing ideas and making things happen Complete a simple program on a computer/Bee Bot Use ICT based toys appropriately	Finding things Out With support use a simple search engine Use the computer to store information (images)
Class 2	Algorithms and programming To understand what algorithms are, how they are implemented as programs on digital devices and follow precise instructions.	How computers work Recognise common uses of information technology beyond school. Communication Using technology safely and respectfully, keeping personal information private; identify where to go for help and support when there are concerns about material on the internet.	Data and information Use technology purposefully to create and organise digital content. E-safety Using technology safely and respectfully, keeping personal information private; identify where to go for help and support when there are concerns about material on the internet.
Class 3	Computer networks (Roald Dahl) To understand computer networks including the internet To use technology safely, respectfully and responsibly.	Algorithms & programming (Aliens) To debug programs, solve problems, use logical reasoning to explain simple algorithms & detect errors	Data & information (chocolate factory) Collecting and presenting data and information
Class 4	Communication and e-safety (myths & legends)	Data and information (the Normans) Collecting and presenting data and information.	Algorithms and programming (rainforest) Explain how simple algorithms work and to detect and correct errors in algorithms and

	<p>To use search technologies effectively to evaluate digital content.</p> <p>E-safety (Artic and the Antarctic) Use search technologies to evaluate digital content.</p> <p>To use technology safely, respectfully, responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>		<p>programs.</p> <p>To use search technologies effectively.</p>
Class 5	<p>Algorithms and programming (King Arthur) Controlling or simulating physical systems; solve problems; use sequence and repetition in programs (input/output); use logical reasoning to explain how simple algorithms work and to detect and correct errors.</p> <p>Computer networks (The railway children) To understand computer networks including the internet</p> <p>To use technology safely, respectfully and responsibly.</p>	<p>Communication (China & India) To use search technologies to evaluate digital content.</p> <p>To use technology safely, respectfully, responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p> <p>Data and information (Kensuke's Kingdom) Collecting, evaluating and presenting information</p>	<p>Algorithms and programming (fantasy worlds) Use logical reasoning to explain how simple algorithms work and to detect and correct errors.</p>

Cycle B

	Autumn	Spring	Summer
Class 2	<p>Data and information</p> <ul style="list-style-type: none"> Using technology to create and organise digital content. <p>Algorithms and programming</p> <ul style="list-style-type: none"> To understand what algorithms are. 	<p>How computers work</p> <ul style="list-style-type: none"> Recognise common uses of information technology beyond school. <p>Algorithms and programming</p> <ul style="list-style-type: none"> To understand how algorithms are implemented as programs on digital devices and follow precise instructions. 	<p>Data and information</p> <ul style="list-style-type: none"> Use technology purposefully to create, organise and manipulate digital content. <p>Communication and Safety</p> <ul style="list-style-type: none"> Keeping information private. Know where to go to for help and support when there are concerns about material on the internet.
Class 3	<p>Algorithms and programming (dragons)</p> <p>To design, write and debug programs.</p>	<p>Communication (kings & queens)</p> <p>To use search technologies effectively</p> <p>To use technology safely, respectfully and responsibly.</p>	<p>Safety (Superheroes)</p> <p>To use search technologies effectively.</p> <p>To use technology safely, respectfully, responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>
Class 4	<p>How computers work (science fiction)</p> <p>To understand computer networks and the opportunities they offer</p> <p>Communication (evacuees)</p> <p>Use search technologies.</p> <p>To use technology safely, respectfully, responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>	<p>Algorithms and programming (Robots)</p> <p>To debug programs, solve problems, use logical reasoning to explain simple algorithms & detect errors</p>	<p>Data and information (Jacqueline Wilson)</p> <p>To use technology safely, respectfully, responsibly</p> <p>Collecting, analysing evaluating and presenting data.</p>
Class 5	<p>How computers work (great journeys)</p> <p>Using the internet for research.</p>	<p>Data and information (Africa)</p> <p>Collecting, analysing, evaluating and presenting data.</p>	<p>Algorithms and programming (Victorians)</p> <p>Design, write and debug programs.</p> <p>Algorithms and programming (Final project)</p>

	<p>Using technology safely, respectfully and responsibly. Algorithms and programming (Greek mythology) To design, write & debug programs.</p>		<p>Design, write and debug programs.</p>
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