

Unlocking Every Child's Potential as a Unique Child of God

Year 1 Computing Curriculum 2023

Children Should be taught:

Pupils should be taught to:

- Co2/1.1 understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- Co2/1.2 create and debug simple programs
- Co2/1.3 use logical reasoning to predict the behaviour of simple programs
- Co2/1.4 use technology purposefully to create, organise, store, manipulate and retrieve digital content
- Co2/1.5 recognise common uses of information technology beyond school
- Co2/1.6 use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about material on the internet or other online technologies

Term 1 – Toy Story	Term 2 – Pirates	Term 3 – Enchanted Woodland
<p>Online Safety Lesson 1 & 2</p> <p>Children will recognise what the internet is and how to use it safely, including how people's feelings can be affected by online content.</p> <p>Computing systems and networks: Improving mouse skills (Lessons 1-3)</p> <p>Knowing how to log in and navigate around a computer, developing mouse skills, learning how to drag, drop, click and control a cursor to create works of art inspired by Kandinsky and self-portraits.</p> <p>Programming 1: Algorithms unplugged (Lessons 1, 2, 4, 5)</p> <p>Using an unplugged approach so that algorithms, decomposition and debugging are made relatable to familiar contexts, such as dressing up and making a sandwich, while learning why instructions need to be very specific.</p>	<p>Online Safety Lesson 3 & 4</p> <p>Children will recognise how to treat others, both online and in person. They will understand the importance of being careful when posting and sharing online.</p> <p>Creating media: Digital imagery (Lessons 1-3)</p> <p>Using creativity and imagination to plan a miniature adventure story and capturing it using developing photography skills. Children learn to enhance photos using a range of editing tools.</p> <p>Programming 2: Bee-Bot (choose appropriate option New or virtual) (Lessons 1-5)</p> <p>Developing early programming skills using either the Bee:Bot or virtual Bee:Bot.</p>	<p>Online Safety Lesson 5</p> <p>To consider ways to balance time spent on and off line.</p> <p>Data handling: Introduction to data (Lessons 1-4)</p> <p>Learning what data is and the different ways that it can be represented as well as developing an understanding of why data is useful, how it can be used and ways in which it can be gathered and recorded both by humans and computers.</p> <p>Skills showcase: Rocket to the moon ((Lessons 1-3)</p> <p>Developing keyboard and mouse skills through designing individual rockets, creating a digital list of materials, using drawing software and recording data.</p>
<p>Key Vocab:</p> <p>log off, log on, software, monitor, click, drag, undo, clipart, username,</p> <p>algorithm, instructions, specific order, code, Bee-bot, sort,</p>	<p>Key Vocab:</p> <p>Image, photograph, photo story, sequence, camera, edit, crop, editing software,</p> <p>Algorithm, Bee-Bot, code, instructions, precise, explain, program, debug</p>	<p>Key Vocab:</p> <p>Data, information, chart, label, pictogram, resize, table, data collection, digitally, minibeasts, represent, tally, categorise, identify, sort</p> <p>list, designing, digital image, document, editing software, folder, materials, program, algorithm, sequence, order</p>
<p>Curriculum enhancement:</p>	<p>Curriculum enhancement:</p>	<p>Curriculum enhancement:</p>
<p>Essential Skills & Knowledge:</p> <ul style="list-style-type: none"> • Explain how to log in & out of computer; use a mouse and keyboard. • Demonstrate control of the mouse; use dragging & clicking. • Use a basic range of tools on a graphics editing program. Save it to the correct folder. • Identify screen, keyboard, and mouse; explain the function of each part. • Explain that an algorithm is a set of instructions that need to be carried out in order; write a clear algorithm; considering the different steps required. 	<p>Essential Skills & Knowledge:</p> <ul style="list-style-type: none"> • Plan and describe a pictorial story, recognising the importance of sequencing. • Take a photo; identifying what makes a successful photo. • Explain that photos can be changed after they have been taken; identify ways to improve a photo and crop, resize and add a colour filter to a photo. • complete a cycle of predict, test and review using Bee-bots. (What do they think a button will do; what actually happened, was it what needed to happen?) • Recognise which buttons are necessary in the sequence of instructions. Predict 	<p>Essential Skills & Knowledge:</p> <ul style="list-style-type: none"> • Answer questions about data using their representation. • Create a digital pictogram • Use a computer to make a list, explaining how this is safer and more easily shared than a paper list. • Create a digital image using a graphics editor; save a digital image to the correct folder. • Put a set of instructions in the correct order and understand why this is important.

	<p>correct instructions to reach a pre-planned destination.</p> <ul style="list-style-type: none"> • Plan and program a Bee-bot to reach a goal. • Use programming to give the Bee-Bot clear instructions and debug the instructions if they go wrong by identifying and correcting the mistake. • Recognise that technology follows instructions and predict what technology will do. 	
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Year 1 E-Safety – Follow education for a connected world statements/Project Evolve.

It is important that learning outcomes are interpreted within contexts that are relevant to the learner’s experience and are achieved through learning that is matched to the readiness of the learner.

Self-image and identity	Online relationships	Online reputation
<p>I can recognise that there may be people online who could make someone feel sad, embarrassed or upset.</p> <p>If something happens that makes me feel sad, worried, uncomfortable or frightened I can give examples of when and how to speak to an adult I can trust and how they can help.</p>	<p>I can give examples of when I should ask permission to do something online and explain why this is important.</p> <p>I can use the internet with adult support to communicate with people I know (e.g. video call apps or services).</p> <p>I can explain why it is important to be considerate and kind to people online and to respect their choices.</p> <p>I can explain why things one person finds funny or sad online may not always be seen in the same way by others.</p>	<p>I can recognise that information can stay online and could be copied.</p> <p>I can describe what information I should not put online without asking a trusted adult first.</p>
Online bullying	Health, well-being and lifestyle	Privacy and security
<p>I can describe how to behave online in ways that do not upset others and can give examples.</p>	<p>I can explain rules to keep myself safe when using technology both in and beyond the home.</p>	<p>I can explain that passwords are used to protect information, accounts and devices.</p> <p>I can recognise more detailed examples of information that is personal to someone (e.g. where someone lives and goes to school, family names).</p> <p>I can explain why it is important to always ask a trusted adult before sharing any personal information online, belonging to myself or others.</p>
Managing online information		Copyright and ownership
<p>I can give simple examples of how to find information using digital technologies, e.g. search engines, voice activated searching.</p> <p>I know / understand that we can encounter a range of things online including things we like and don't like as well as things which are real or make believe / a joke.</p> <p>I know how to get help from a trusted adult if we see content that makes us feel sad, uncomfortable worried or frightened.</p>		<p>I can explain why work I create using technology belongs to me.</p> <p>I can say why it belongs to me (e.g. 'I designed it' or 'I filmed it').</p> <p>I can save my work under a suitable title / name so that others know it belongs to me (e.g. filename, name on content).</p> <p>I understand that work created by others does not belong to me even if I save a copy.</p>