


St Luke's Key Stage 1 and 2's Computing Journey	Autumn	Spring	Summer
EYFS 	<p>My Online Life: This activity takes place over the course of the term. It meets the objectives as set out by UKCCIS 'Education for a Connected World Framework'.</p>	<p>Nursery Rhyme Coding Using the theme of traditional tales, this activity develops computational thinking, such as the sequencing of instructions and promotes core technology skills. This activity is designed to introduce key computing vocabulary, e.g., sequencing and algorithms. The children will also learn about using programmable toys, using technology safely/sensibly and working with a partner.</p>	<p>Pretty Pictures The children will learn to take photos, edit and share them as they undertake creative tasks. This important skill will enable them to document their learning and ideas. The children will also learn the basics of recording videos and audio to explain their thinking.</p>
Year 1	<p>My Online Life: This activity takes place over the course of the term. It meets the objectives as set out by UKCCIS 'Education for a Connected World Framework'.</p>	<p>What is a Computer? In this unit children will learn about the different parts of a computer and iPad. They will learn new skills, tips and tricks. The children will be able to see the inner working of a computer and build their own. Includes a range of continuous provision activities.</p> <p>Mini-Beasts: Children will use technology to classify minibeasts. In this activity the children will learn about gathering and presenting information. They will then make their own David Attenborough style nature documentary. Includes a range of continuous provision activities.</p>	<p>Drawing with Shapes: This activity blends art and maths. The children will learn excellent drawing skills and master digital drawing tools while exploring shapes and numbers, following an algorithm and problem-solving. The children will also participate in a QR code scavenger hunt to record and capture data in a tally and simple bar chart.</p> <p>My Friend the Robot In this unit children will learn all about computational thinking and problem solving with a variety of unplugged activities and online coding games.</p>

<p>Year 2</p>	<p>My Online Life: This activity takes place over the course of the term. It meets the objectives as set out by UKCCIS 'Education for a Connected World Framework'.</p>	<p>Code a Story: The children will write a basic story with illustrations. They will then turn this into an animated story using visual coding. The activity will introduce new concepts such as conditional language, repeat loops and debugging.</p> <p>Story Land: The children take the role of authors to write the sequel to popular children's stories. They then create illustrations for their story and record them self-reading it in order to create an audiobook to publish online.</p>	<p>Making Games In this activity, the children will use Scratch Jr to create simple game programs. They will learn about logical reasoning, algorithms, repeat commands, programs and debugging.</p> <p>Presentations and Typing This unit of work will allow the children to develop their keyboard and digital skills as they create a presentation about their digital life. They will also learn about using search engines and organising data using a tally chart.</p>
<p>Year 3</p>	<p>My Online Life: This activity takes place over the course of the term. It meets the objectives as set out by UKCCIS 'Education for a Connected World Framework'.</p>	<p>Dancing Robot: The children will use some of Scratch Jr's more advanced coding blocks to create their own interactive dancing robot game. The children will learn the important skills of critical thinking, problem solving and debugging</p> <p>Rainforests: The children will explore rainforests through new Virtual Reality (VR) apps. They will also create their own interactive learning games for younger children to play.</p>	<p>Programming with Robots Robots can be found almost everywhere. In this unit, the children will explore robots in the world around them, learn about driverless cars and automation, create graphics and programs using Scratch, and learn about repeat, variables, and conditional commands. In the final challenge, the children will create a program for a driverless car to navigate a city map.</p> <p>T-Shirt Designer: The children will become illustrators and design their own t-shirts.</p>
<p>Year 4</p>	<p>My Online Life: This activity takes place over the course of the term. It meets the objectives as set out by UKCCIS 'Education for a Connected World Framework'.</p>	<p>Games Designer The children will learn about the video game designer and developer careers. They will play a retro video game and discuss different types of video games and their age rating. They will learn about creating safe and secure usernames and passwords. The children will then design and code their own hero-versus-villain-style video game. Finally, they will share their video game with the world.</p> <p>Endangered Animals</p>	<p>Hour of Code The children will be introduced to the Hour of Code website and a series of fun programming puzzles in this activity. Together with the puzzles, they will gain confidence with various computational thinking concepts each week. They will document their process and skills in a digital pupil journal, and in the final lesson, they will use their creativity and programming skills to design and present their own puzzle.</p>

		<p>The children will learn new online skills and discuss AI, computer-generated images and copyright. They will visit protected national parks by using Google Earth. Then the children will create illustrations and use a video editing app to produce a social media advert that raises awareness of our planet's endangered animals. This activity complements KS2 teaching on the environment and the effects of climate change and human impact.</p>	<p>Minecraft Challenges: Who is the best at building? The children take part in a series of maths/Minecraft challenges.</p>
<p>Year 5</p>	<p>My Online Life: This activity takes place over the course of the term. It meets the objectives as set out by UKCCIS 'Education for a Connected World Framework'.</p>	<p>Lost in Space In this activity, the children will create a quiz program in Scratch. The children will learn about decomposition, algorithm flow charts, and creating programs with a variable. This activity has an optional extension; the children can explore Sphero programmable robots and play a fun space-themed game.</p> <p>Making AR Games: In this activity the children will be introduced to the world of Augmented Reality (AR). They will then be set the task of designing and creating game that uses AR.</p>	<p>Web Designer In this unit, the children will learn about the technology around them, the history of the web, computer networks, basic HTML, and how to create and publish their websites.</p> <p>News Reporter & Podcaster: Children will produce their own podcasts to publish online.</p>
<p>Year 6</p>	<p>My Online Life: This activity takes place over the course of the term. It meets the objectives as set out by UKCCIS 'Education for a Connected World Framework'.</p>	<p>Crossy Roads: The children will create their own version of the popular app Crossy Roads using visual coding.</p> <p>VR Worlds: The class will explore Virtual Reality (VR) and how it can be used in the classroom. The children will also build their own VR world.</p>	<p>Coding Playground Children will be introduced to the role of an App Developer. They will design and prototype an app for their school using Keynote. The children will learn valuable digital skills and be introduced to new online concepts and vocabulary. They will also be introduced to text-based programming, how apps are coded and complete self-paced programming challenges using the Swift Playground app.</p> <p>Money The children will explore the evolution of money, digital scams, careers, salary, and stocks through a series of creative digital challenges that will help them understand how money</p>

			works. In the final two lessons, the children will create a spreadsheet and choose fantasy stocks to evaluate data and calculate profit or loss.
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