

Term/ Week	Knowledge, Skills and Understanding (KSU)							
	Topic	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
1.1 (Autumn 1)	Topic for curriculum year.	<p><b>1.1 Fantastic Tales</b> This is a cross curricula activity with links to both Literacy and Art. Children will learn a popular tale and then re-tell the story by producing their own animation.</p> <p><b>Computing Curriculum Foci: DL</b></p> <p><b>S/W:</b> Puppet pals app iPads – camera app</p>	<p><b>1.1 Fantastic Tales:</b> This is a cross curricula activity with links to both Literacy and Art. Children will learn a popular tale and then re-tell the story by producing their own animation.</p> <p>Building on from EYFS, children will learn more in depth knowledge of the flow of a story from the beginning, middle and end.</p> <p><b>Computing Curriculum Foci: DL</b></p> <p><b>S/W:</b> Puppet pals app iPads – camera app</p>	<p><b>1.1 Mythical Creatures:</b> The children will learn about the history of and different types of animation. They will firstly produce a story about their made-up mythical creature and then create their animation out of Clay/Plasticine or Paper using Animate it.</p> <p><b>Computing Curriculum Foci: IT</b></p> <p><b>S/W:</b> Animate it app Camera</p>	<p><b>1.1 Going for Gold:</b> Children will create a “My body, My fitness” e-book, which will document each week a personalised “Going for Gold” record.</p> <p><b>S/W:</b> Book creator, Brushes, Cameras, Pic Collage.</p> <p><b>Computing Curriculum Foci: IT &amp; DL</b></p>	<p><b>1.1 Making Games:</b> This lesson plan will take you through the necessary steps to create your very first computer game in Scratch. Block base programming. Children will use <a href="https://scratch.mit.edu/">https://scratch.mit.edu/</a> (Scratch cloud: Type scratch in google) This can be accessed on ipads.</p> <p><b>Computing Curriculum Foci: IT &amp; CS</b></p> <p><b>S/W:</b> Scratch Cloud: <a href="https://scratch.mit.edu/">https://scratch.mit.edu/</a></p>	<p><b>1.1 We are time travellers:</b> In this topic students will learn how to use Styks software to create suitable animations.</p> <p><b>Computing Curriculum Foci: IT, CS &amp; DL</b></p> <p><b>S/W:</b> Styks</p>	<p><b>1.1 Earth and Space:</b> In this topic children will be exploring the earth and space using technology. The topic is designed so children look at all the different aspects of space.</p> <p><b>Computing Curriculum Foci: IT, CS &amp; DL</b></p> <p><b>S/W:</b> Hopscotch app Astro App and MSQRD Audioboom app Book Creator or Pic collage</p>
		1.2 (Autumn 2)	<p><b>1.2 Art Attack:</b> Children will experiment with different drawing apps and software across a range of devices whilst being introduced to different styles of digital art. This activity will show children how to find images using the web.</p> <p><b>S/W:</b> Drawing with Carl app/software Splosh Hello colour pencil app 2 paint and 2 paint a picture</p> <p><b>Computing Curriculum Foci: DL &amp; IT</b></p>	<p><b>1.2 A is for Algorithm:</b> This <b>unplugged</b> activity will demonstrate to children the importance of sequencing by breaking down popular stories into individual elements so children can see the importance of following a sequence. Children will gain an understanding of the term Algorithm.</p> <p><b>Computing Curriculum Foci: CS</b></p> <p><b>No S/W required</b></p>	<p><b>1.2 E-Safety:</b> Children will learn about key aspects of safety – what is safety/internet dangers/cyberbullying/social networking, gaming and collaboration.</p> <p><b>Computing Curriculum Foci: DL &amp; IT</b></p> <p><b>No S/W required.</b></p>	<p><b>1.2 Big Robots:</b> The project will reinforce an understanding of directional language and programming. The final lesson will provide children with the opportunity to write their own algorithm by creating a flowchart.</p> <p><b>S/W:</b> Hopscotch app, Pureflow app, Robots</p> <p><b>Computing Curriculum Foci: CS</b></p>	<p><b>1.2 We built this city:</b> This unit will encourage children to create their own 3D world using Minecraft.</p> <p><b>Computing Curriculum Foci: IT &amp; DL</b></p> <p><b>S/W:</b> Toca builder app <a href="http://www.minecraftedu.com">www.minecraftedu.com</a> Chrome builder</p>	<p><b>1.2 E-Safety:</b> Children will study the topic of safety including social networking, gaming and collaboration, cyberbullying, copyright and passwords and security.</p> <p><b>Computing Curriculum Foci: IT</b></p> <p><b>No software required.</b></p>

<p><b>2.1</b> (Spring 1)</p>		<p><b>2.1 A is for Algorithm:</b></p> <p>This <b>unplugged</b> activity will demonstrate to children the importance of sequencing by breaking down popular stories into individual elements so children can see the importance of following a sequence. Children will gain an understanding of the term Algorithm.</p> <p><b>Computing Curriculum Foci: CS</b></p>	<p><b>2.1 E-Safety:</b></p> <p>Children will learn about key aspects of safety – what is safety/internet dangers/cyberbullying.</p> <p><b>Computing Curriculum Foci: DL &amp; IT</b></p> <p><b>No S/W required</b></p>	<p><b>2.1 Walking with Dinosaurs:</b></p> <p>By the end of this project, children will fully understand the term algorithm and will be able to use a simple app on an iPad to reinforce this learning.</p> <p><b>Computing Curriculum Foci: DL &amp; IT</b></p> <p>Toca Boca hair salon app, Daisy the Dinosaur app, <a href="http://www.cbeebies/i-can-cook/game/i-can-cook-game">www.cbeebies/i-can-cook/game/i-can-cook-game</a>, <a href="http://www.learncode.org">www.learncode.org</a></p>	<p><b>2.1 E-Safety:</b></p> <p>Children will study the topic of safety including social networking, gaming and collaboration, cyberbullying, copyright and passwords and security.</p> <p><b>Computing Curriculum Foci: IT</b></p> <p><b>No software required.</b></p>	<p><b>2.1 Back to the Future:</b></p> <p>In this project, children will create their own blog detailing what they learn from researching about different technologies, inventors and the different components of a computer.</p> <p><b>Computing Curriculum Foci: IT &amp; CS</b></p> <p><b>S/W:</b> Thinkglink app, Edmodo Internet access, MS Word (iPad)</p>	<p><b>2.1 We are traders:</b></p> <p>Children will learn how to design and write programs to achieve specific goals.</p> <p><b>Computing Curriculum Foci: IT &amp; CS</b></p> <p><b>S/W:</b> Espresso coding MS Office (iPad) Excel Publisher Word</p>	<p><b>2.1 Robotics:</b></p> <p>This will involve the children creating a clawbot and creating programs designed to instruct the robot to perform simple tasks.</p> <p><b>Computing Curriculum Foci: IT, CS &amp; DL</b></p> <p><b>S/W:</b> VEX software Modkit</p>
<p><b>2.2</b> (Spring 2)</p>		<p><b>2.2 E-Safety</b></p> <p>Children will learn about key aspects of safety – what is safety/internet dangers/cyberbullying.</p> <p><b>Computing Curriculum Foci: DL &amp; IT</b></p>	<p><b>2.2 Junior Explorer:</b></p> <p>Children will learn to give sequences of instructions to control Bee-Bots (floor robot). Children will understand that instructions need to be given in a correct order.</p> <p><b>Computing Curriculum Foci: DL &amp; CS</b></p> <p><b>S/W:</b> Beebots</p>	<p><b>2.2 Young Authors:</b></p> <p>This topic will take the children on a technological journey and show them how technology has advanced over the years. This project will culminate in the children creating their own eBook.</p> <p><b>Computing Curriculum Foci: DL &amp; IT</b></p> <p><b>S/W:</b> Book creator, iBook, Skitch, Popplet, PowerPoint/Keynote, MS Word/Pages.</p>	<p><b>2.2 My first Scratch:</b></p> <p>Children will create their very first computer game in Scratch.</p> <p>In this unit children will look at basic programming using programming blocks. Children will use <a href="https://scratch.mit.edu/">https://scratch.mit.edu/</a> (Scratch cloud: Type scratch in google) This can be accessed on ipads.</p> <p><b>Computing Curriculum Foci: CS &amp; IT</b></p>	<p><b>2.2 E-Safety:</b></p> <p>Children will study the topic of safety including social networking, gaming and collaboration, cyberbullying, copyright and passwords and security</p> <p><b>Computing Curriculum Foci: IT DL CS</b></p> <p><b>No software required</b></p>	<p><b>2.2 We are journalists:</b></p> <p>In this topic children will work together to publish a newspaper.</p> <p><b>Computing Curriculum Foci: IT &amp; DL</b></p> <p><b>S/W:</b> Camera Imacs MS Publisher iPads</p>	<p><b>2.2 Grand Designs:</b></p> <p>Over six sessions, children will be exploring drawings/illustrations representing both 2D and 3D worlds.</p> <p><b>Computing Curriculum Foci: IT &amp; DL</b></p> <p><b>S/W:</b> Google Sketch-up Book creator app iPads Seesaw Brushes Toco Builder</p>

<p><b>3.1</b> (Summer 1)</p>	<p><b>Digital Citizenship &amp; Technology (DL) eSafety</b></p>	<p><b>3.1 Junior Explorers</b> Children will learn to give sequences of instructions to control Bee-Bots (floor robot). Children will understand that instructions need to be given in a correct order.  <b>Computing Curriculum Foci: DL &amp; IT</b>  <b>S/W Beebots</b></p>	<p><b>3.1 Little Computers:</b> Activity explaining what a computer and peripherals are. Children will make their own computer using junk and develop basic computer skills through playing a variety of games.  <b>Computing Curriculum Foci: DL &amp; IT</b>  <b>S/W:</b> Computers, laptops or iPads with paint software.</p>	<p><b>3.1 Crazy Creatures:</b> Throughout this project, children will further develop their understanding of control, directional language and programming, using Bee-Bots/Lego bots and using appropriate control apps.  <b>Computing Curriculum Foci: CS</b>  <b>S/W:</b> Bee-Bots, Bee-bots iPad app Lego robots</p>	<p><b>3.1 Young Coders:</b> In this computing activity children will experiment with a range of computer science activities.  <b>S/W:</b> Lightbot app or www. Lightbot.com, Book creator  <b>Computing Curriculum Foci: CS</b></p>	<p><b>3.1 Final Score:</b> Working in groups, the children will create their own sports news report which they will share and work on together online using iWork or Google Docs.  <b>Computing Curriculum Foci: IT &amp; DL</b>  <b>S/W:</b> MS Word (iPad), Pages Dropbox</p>	<p><b>3.1 Cars:</b> Children will create a 2 player game that includes racing cars around a track. Block base programming. Children will use <a href="https://scratch.mit.edu/">https://scratch.mit.edu/</a> (Scratch cloud: Type scratch in google) This can be accessed on ipads.  <b>S/W:</b> Scratch Cloud: <a href="https://scratch.mit.edu/">https://scratch.mit.edu/</a>  <b>Computing Curriculum Foci: IT &amp; CS</b></p>	<p><b>3.1 E-Safety:</b> Children will study key topics around the subject of e-safety  <b>Computing Curriculum Foci: IT</b>  <b>No Software required</b>  <b>Young Authors:</b> During this project, children will develop a story idea in small groups to create a storyboard. The children will then use Book Creator and Brushes to create their own eBook including text, illustrations and audio.</p>
<p><b>3.2</b> (Summer 2)</p>		<p><b>3.2 Little Computers:</b> Activity explaining what a computer and peripherals are. Children will make their own computer using junk and develop basic computer skills through playing a variety of games.  <b>Computing Curriculum Foci: IT &amp; DL</b></p> <p>1.1 eSafety Awareness Raising (Video &amp; Class Discussion) 1.3 Introducing on-line life and what it is? Including gaming e.g. Minecraft 1.4 What is Cyber Bullying? 1.5 Stranger Danger</p>	<p><b>3.2 Art Attack:</b> Children will experiment with different drawing apps and software across a range of devices whilst being introduced to different styles of digital art. This activity will show children how to find images using the web.  <b>Computing Curriculum Foci: DL &amp; IT</b></p> <p>1.2 eSafety Awareness Raising (Video &amp; Class Discussion) 1.5 Introducing on-line life and what it is? Including gaming e.g. Minecraft 1.6 What is Cyber Bullying? 1.5 Stranger Danger</p>	<p><b>3.2 We are publishers:</b> Children will create an eBook retelling the story of a famous book including illustrations that they will create themselves using Brushes.  <b>Computing Curriculum Foci: DL &amp; IT</b></p> <p>2.1 eSafety Awareness Raising (Video &amp; Class Discussion) 2.2 Communicating On-line and images, Social Networking. 2.5 Friend or Foe</p>	<p><b>3.2 We love games</b> In this unit children will use gaming apps to develop computational thinking skills and develop a simple program.  Computing Curriculum Foci: CS &amp; IT  <b>S/W:</b> Flowol, Word, Pure flow app or Popplet, Hopscotch app</p> <p>2.1 eSafety Awareness Raising (Video &amp; Class Discussion) 2.2 Communicating On-line and images, Social Networking. 2.3 Gaming and Collaboration. 2.5 Friend or Foe</p>	<p><b>3.2 Hurray for Hollywood:</b> The children will devise their own characters, plot and storyboard before filming a short movie which they will then edit in iMovie.  <b>Computing Curriculum Foci: DL</b>  <b>S/W:</b> Flipcam or iPad Comic Life Popplet Pages Publisher iMovie or Windows movie maker</p> <p>2.1 eSafety Awareness Raising (Video &amp; Class Discussion) 2.2 Communicating On-line and images, Social Networking. 2.3 Gaming and Collaboration. 2.4 Cyberbullying &amp; Report Abuse. 2.5 Friend or Foe.</p>	<p><b>3.2 Robotics:</b> Children will use VEX software to design build and produce a simple program to control the basebots.  <b>Computing Curriculum Foci: CS &amp; IT</b>  <b>S/W:</b> VEX software</p> <p>2.1 eSafety Awareness Raising (Video &amp; Class Discussion) 2.2 Communicating On-line and images, Social Networking. 2.3 Gaming and Collaboration. 2.4 Cyberbullying &amp; Report Abuse. 2.5 Friend or Foe 2.6 Copyright, what is it?</p>	<p><b>Computing Curriculum Foci: IT &amp; DL</b></p> <p>2.1 eSafety Awareness Raising (Video &amp; Class Discussion) 2.2 Communicating On-line and images, Social Networking. 2.3 Gaming and Collaboration. 2.4 Cyberbullying &amp; Report Abuse. 2.5 Friend or Foe 2.6 Copyright, what is it? 2.7 Passwords &amp; Security (Virus, downloads, pop ups and scams)</p>

**Resources:**

EYFS: Computers, laptops or iPads with paint software.

Year 1: Drawing with Carl app/software, Splash, Hello colour pencil app, 2 paint and 2 paint a picture.

Year 2: Book creator, Brushes app

Year 3: Flowol, Word, Pure flow app or Popplet, Hopscotch app

Year 4: Flipcam or iPad, Comic Life, Popplet, Pages, Publisher, iMovie or Windows movie maker.

Year 5: VEX Software.

Year 6: Brushes app, Paint, Popplet app, Book creator app, MS Publisher or Comic Life.

**Useful subject links:**

E-Safety links – evidenced and detailed in curriculum progression plan.