Long Term Plan - Computing

Year Group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	Topic Link:	Topic Link:	Topic Link:	Topic Link:	Topic Link:	Topic Link:
	30-50 months operate simple equipment. toys with knobs or pulleys, or real objects. ·Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images. Knows that information can be retrieved from computers.	·Knows how to ·Shows an interest in technological software.	40 to 60+ months program on a computer. ·Interacts with age-appropriate computer	·Completes a simple	ELG 15 that a range of technology is used in places such as homes and schools. ·They select and use technology for particular purposes.	·Children recognise
	Resources used across the Year (Aut, Spr and Sum)					
	Beebots-Aut Microwave(home corner)-Aut Cubetto-Spr Unplugged: - handwashing-Spr - Jam Sandwich-Sum Body part algorithm-Sum Tocoband-Sum	Computer discovery - exploring IT equipment-Aut/Spr Quiver-Spr Masquerade-Sum	Smartie The Penguin-Spr Buddy The Dog-Spr Safer Internet Day-Spr	2paint a picture-Aut/Sum Doodlebuddy-Sum 2Simple-Spr Google Spotlight - Piggy-Spr		

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Year 1	**What if you could go back in time?**	**Who are our Neighbours?**	**What will happen if the ice melts?**	**What if we didn't have aeroplanes?**	**Superheroes-do they live amongst us?**	**What if you lived in Australia?**
	Topic Link:	Topic Link:	Topic Link:	Topic Link:	Topic Link:	Topic Link:
	2Code - On-screen Challenges and Tasks 1	Internet and Email	Stay Safe	Pictograms	Simple Logo - On-screen Challenges and Tasks 1	Create an E-Book
	Using Chimp level 2Code in Purple Mash on computer or iPad to develop programming knowledge and skills by creating and debugging algorithms to control screen based objects through guided activities and creative coding.	Pupils are taught and experience basic email and searching for content online. Consider the different kinds of device that can connect to the internet.	Pupils consider how to stay safe online including using different technologies, different activities including publishing and produce a charter for staying safe.	Pupils investigate how to display information in different ways and learn how to do this as a pictogram, progressing to do this using software and online applications.	Via physical experience in large spaces, using Bee-bots and through Logo environments such as 2Go in Purple Mash, j2code and Textease Turtle to control screen objects to move, turn and draw lines, patterns and shapes.	Look at the characteristics of a selection of e-books and consider how they differ from printed books. Pupils create their own e-book and publish it for others to read.

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Year 2	**What if you could design your perfect house?**	**What if you could choose a capital city for the UK?**	**Should we be grateful for the Great Fire of London**	**What if you lived beside the seaside?**	**Going into the unknown-is it brave or reckless?**	**What if you lived in India?**
	Topic Link:	Topic Link:	Topic Link:	Topic Link:	Topic Link:	Topic Link:
	2Code - On-screen Challenges and Tasks 2	Technology Around Us	Zip It	Simple Graphs	Simple Logo - On-screen Challenges and Tasks 2	Create a 2D Animation
	Using Chimp level 2Code in Purple Mash on computer or iPad to develop programming knowledge and skills by creating and debugging algorithms to control screen based objects through guided activities and creative coding.	Help pupils to understand what technology is and let them consider and share what they have at home and have seen in the wider world. Create a presentation.	Pupils learn to judge how to maintain privacy and how to prevent their personal information being compromised in a range of online situations.	Pupils learn how to create simple graphs to display information and understand how this has developed from the pictograms they previously experienced.	Via physical experience in large spaces, using Bee-bots and through Logo environments such as 2Go in Purple Mash, j2code and Textease Turtle to control screen objects to move, turn and draw lines, patterns and shapes.	Make a simple paper based animation and discuss the optical illusion behind it. Experiment with different aspects of technology to produce a range of 2D effects.

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Year 3	**Would you prefer to live during the Stone age or Iron age?**	**What if the ground started to move?**	**What if you live in Ancient Egypt?**	**What if you lived in a different country?**	**What if the Romans had never invaded Britain?**	**What if you were a town planner for Nuneaton?**
	Topic Link:	Topic Link:	Topic Link:	Topic Link:	Topic Link:	Topic Link:
	Computing Unplugged	Computers and Networks 1	Be Smart	Create a Presentation	2 Code - On-screen Challenges and Tasks 1	Online Collaboration 1
	A series of computational thinking activities carried out as hands on kinaesthetic experiences away from computers and other devices. Materials can be downloaded relevant websites.	Pupils learn about and experience using carrying out effective searches and navigating through and between web pages. Also using web content in their work.	Pupils learn strategies and experience scenarios and situations which will help create a more effective use of the internet and resources it provides.	Show pupils different vehicles for delivering a presentation and help them develop techniques to create their own. Encourage them to present it to an audience.	Chimp to Gibbon level coding through 2Code in Purple Mash on computer or iPad. Creating programming sequences through guided activities and more creative free coding.	Know what collaborate means and think about how and why people do it. Pupils experience some online collaboration through discussions and shared writing spaces.

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Year 4	**What if you had to climb a mountain?**	**What if you had to choose: Athenian or Spartan?**	**Where in the UK would you live?**	**What if you were born in Saxon times?**	**What if a river took a different course?**	**What if there was still mining in Nuneaton?**
	Topic Link:	Topic Link:	Topic Link:	Topic Link:	Topic Link:	Topic Link:
	Create a Simple Game Using 2DIY	Making Sense of Online Content 1	Flag It	Simple Spreadsheets	2 Code - On-screen Challenges and Tasks 2	3D Stop Frame Animation
	2DIY in Purple Mash on PC or iPad enables pupils to create a range of computer games and activities using a simple interface and then immediately publish their game for others to play.	Help pupils look at web content more discerningly. Pupils consider the suitability and reliability of the information on some websites and carefully evaluate it.	Pupils consider different activities involving online communication and collaboration and how to avoid inappropriate content and contact.	Pupils experience how spreadsheets can record, manipulate and display large amounts of data. They learn key vocabulary and how to apply simple formulas.	Gibbon level coding through 2Code in Purple Mash on computer or iPad. Creating more sophisticated programming sequences through guided activities and creative free coding.	Pupils consider the difference between 2D and 3D animation techniques. Create a stop frame animation using one of a number of applications and physical objects.

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Year 5	**What if there were no rainforests?**	**What if the Vikings had never invaded?**	**What if we didn't have a monarchy?**	**What if you could change the world?**	**What if we didn't have medicine?**	**What if you lived in Mexico**
	Topic Link:	Topic Link:	Topic Link:	Topic Link:	Topic Link:	Topic Link:
	Use Logo to Create Shapes and Patterns	Computers and Networks 1	Contact	Creating and Using Databases	Online Collaboration 1	2 Code On-screen Challenges and Tasks 1
	Using a logo based program to create drawings of more complex shapes and patterns by creating procedures and using repetition. Add colour to create interesting display material.	Pupils learn about and experience using carrying out effective searches and navigating through and between web pages. Also using web content in their work.	Pupil consider further the online safety issues around appropriate content and contact and learn about possible strategies to deal with examples.	Pupils experience how to create and use a field type database to record, display and interrogate information on a variety of different topics.	Know what collaborate means and think about how and why people do it. Pupils experience some online collaboration through discussions and shared writing spaces.	Gibbon to Gorilla level coding through 2Code in Purple Mash on computer or iPad. Creating programming sequences through guided activities and more creative free coding.

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Year 6	**Could you survive?**	**Is it right to fight?**	**Is the earth fractured or flourishing?**	**What if the Mayans never existed?**	**Does the punishment fit the crime?**	**Can you have a balance of power?**
	Topic Link:	Topic Link:	Topic Link:	Topic Link:	Topic Link:	Topic Link:
	Create an Activity for Younger Children	Making Sense of Online Content 2	Respect	Spreadsheet Modelling	2 Code On-screen Challenges and Tasks 2	News Broadcast
	Look at games and activities designed to attract younger children such as year one pupils. Create a suitable game for a younger audience using Scratch, Logo and / or 2DIY 3D.	Pupils try to recognise the difference between good and poor web content and learn about how to evaluate websites effectively. Experience hoax or fake online content.	Pupils learn to consider that online activity leaves a digital footprint and that this is related to material that is both uploaded and downloaded.	How spreadsheets can be used in real life situations to handle large amounts of numerical data and how they can be used to manage financial information.	Gorilla level coding through 2Code in Purple Mash on computer or iPad. Creating more sophisticated programming sequences through guided activities and creative free coding.	Watch and listen to and then discuss some news content via the internet. In groups, pupils write, produce and edit a short news programme for an audio or visual media.

Programming	Digital and Online Technologies	Online Safety	Data Handling & Multi Media		