	South Farnborough Infants School **Skills and Knowledge Progression in Computing**	
Intent	Our intent is for children to be digitally literate and competent users of technology to in order to prepare them to become socially responsible and active participants in an ever changing digital world. Children will be able to use technology to learn, create, communicate and problem solve.	
EYFS	**Year 1**	**Year 2**
	Computing (based on the NCCE curriculum) *In addition to Online Safety taught as part of the Computing curriculum, the PSHE (RSE) curriculum, themed weeks, regular assemblies and visitors, each class has an online safety lesson each half term.*	
Autumn Term		
Reception	**Year 1**	**Year 2**
Autumn 1 - Internet safety **Set class rules** All children to identify trusted adults to talk to in real life and online.	**Autumn 1 - Internet safety** **Review the KS1 AUP** All children to know the rules for staying safe online and identify trusted adults to talk to.	**Autumn 1 - Internet safety** **Review the KS1 AUP** All children to know the rules for staying safe online and identify trusted adults to talk to.

.	**Autumn 1** **This topic builds on:** ● EYFS use of technology (e.g. QR codes, iPads, BeeBots) understanding of Online Safety (e.g. having your safe adult with you) **In this topic, children should learn:** **Computing Systems and Networks: Technology around us** *Recognising technology in school and using it responsibly.* ● Use technology purposefully to create, organise, story, manipulate and retrieve digital content ● Recognise common uses of information technology beyond school ● Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies	**Autumn 1** **This topic builds on:** ● Y1: Computing Systems and Networks: Technology around us ● Y1: Creating Media: Digital painting **In this topic, children should learn:** **Computing Systems and Networks: Information technology around us** *Identifying IT and how its responsible use improved our worlds in school and beyond.* ● Use technology purposefully to create, organise, store, manipulate, and retrieve digital content ● Recognise common uses of information technology beyond school ● Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies

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Autumn 2 - Internet safety **Smartie the Penguin (EYFS version)** Story A covers: Pop ups and in app purchasing Inappropriate websites for older children Cyberbullying	**Autumn 2 - Internet safety** **Smartie the Penguin (Y1 version)** Story A covers: Pop ups and in app purchasing Inappropriate websites for older children Cyberbullying	**Autumn 2 - Internet safety** **Smartie the Penguin (Y2 version)** Story A covers: Pop ups and in app purchasing Inappropriate websites for older children Cyberbullying

	Autumn 2 **Creating Media: Digital painting** *Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally.* ● Use technology purposefully to create, organise, store, manipulate, and retrieve digital content **This topic leads to:** ● Y2: Computing Systems and Networks: Information technology around us ● Y2: Creating Media: Digital photography	**Autumn 2** **Creating Media: Digital photography** *Capturing and changing digital photographs for different purposes.* ● Use technology purposefully to create, organise, store, manipulate, and retrieve digital content ● Recognise common uses of information technology beyond school ● Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies **This topic leads to:** ● Y3: Computing Systems and Networks: Connecting computers ● Y3: Creating Media: Stop-frame ● animation
	Spring Term	
Spring 1 - Internet safety **INTERNET SAFETY DAY** **Tuesday 11th Feb** **Smartie the Penguin (EYFS version)** Story B covers: Upsetting images Unreliable information Talking to strangers online	**Spring 1 - Internet safety** **INTERNET SAFETY DAY** **Tuesday 11th Feb** **Smartie the Penguin (Y1 version)** **Story B covers:** Upsetting images Unreliable information	**Spring 1 - Internet safety** **INTERNET SAFETY DAY** **Tuesday 11th Feb** **Smartie the Penguin (Y2 version)** **Story B covers:** Upsetting images Unreliable information

	Talking to strangers online	Talking to strangers online
	Spring 1 **This topic builds on:** ● EYFS use of technology (e.g. QR codes, iPads, BeeBots) understanding of Online Safety (e.g. having your safe adult with you) **In this topic, children should learn:** **Programming A: Moving a robot** *Writing short algorithms and programs for floor robots, and predicting program outcomes.* ● Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions ● Create and debug simple programs	**Spring 1** **This topic builds on:** ● Y1: Programming A: Moving a robot ● Y1: Data and Information: Grouping data **In this topic, children should learn:** **Programming A: Robot algorithms** *Creating and debugging programs, and using logical reasoning to make predictions.* ● Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions ● Create and debug simple programs ● Use logical reasoning to predict the behaviour of simple programs ● Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies ●

	● Use logical reasoning to predict the behaviour of simple programs ● Recognise common uses of information technology beyond school ●	
Spring 2 - Internet safety Hanni and the Magic Window The story helps encourage children to speak out and get help for things that they have seen in real life and online.	**Spring 2 - Internet safety** Jessie and Friends – episode 1 Watching videos https://www.thinkuknow.co.uk/parents/jessie-and-friends-videos/	**Spring 2 - Internet safety** Jessie and Friends – episode 2 Sharing Pictures https://www.thinkuknow.co.uk/parents/jessie-and-friends-videos/
	Spring 2 **Data and Information: Grouping data** *Exploring object labels, then using them to sort and group objects by properties.* ● Use technology purposefully to create, organise, store, manipulate, and retrieve digital content ● Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or	**Spring 2** **Data and Information: Pictograms** *Collecting data in tally charts and using attributes to organise and present data on a computer.* ● Use technology purposefully to create, organise, store, manipulate, and retrieve digital content ● Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies **This topic leads to:** ● Y3: Programming A: Sequencing sounds

	contact on the internet or other online technologies **This topic leads to:** ● Y2: Programming A: Robot algorithms ● Y2: Data and Information: Pictograms	● Y3: Data and Information: Branching databases
<td colspan="3" align="center">**Summer term**</td>
Summer 1 - Internet safety **Digiduck's Big Decision** How to be a good friend online. TASK: sequence the story	**Summer 1 - Internet safety** Digiduck's Famous Friend Critical thinking and reliability online. TASK: sequence the story	**Summer 1 - Internet safety** **D**igiduck and the Magic Castle Playing games online (including peer pressures, password sharing and in-app purchasing) TASK: email Digiduck to tell him how to play games safely
	Summer 1 **This topic builds on:** ● EYFS use of technology (e.g. QR codes, iPads, BeeBots) understanding of Online Safety (e.g. having your safe adult with you) **In this topic, children should learn:** **Creating Media: Digital writing**	**Summer 1** **This topic builds on:** ● Y1: Creating Media: Digital writing ● Y1: Programming B: Programming animations **In this topic, children should learn:** **Creating Media: Digital music** *Using a computer as a tool to explore rhythms and melodies before creating a musical composition.*

	Using a computer to create and format text, before comparing to writing non-digitally. ● Use technology purposefully to create, organise, store, manipulate, and retrieve digital content ● Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies	● Use technology purposefully to create, organise, store, manipulate, and retrieve digital content
Summer 2 - Internet safety **On the internet** Outlines what we can use the internet for TASK: match words to the pictures	**Summer 2 - Internet safety** Detective Digiduck Reliability of online information and how to check information TASK: bubbles and clouds for	**Summer 2 - Internet safety** Digiduck Saves the Day Positive uses of the internet to help others TASK: Say well done to the animals and explain/celebrate the good choices they made online

Summer 2	Summer 2
Programming B: Programming animations	**Programming B: Programming quizzes**
Designing and programming the movement of a character on screen to tell stories,	*Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz.*
● Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions ● Create and debug simple programs ● Use logical reasoning to predict the behaviour of simple programs	● Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions ● Create and debug simple programs ● Use logical reasoning to predict the behaviour of simple programs ● Use technology purposefully to create, organise, store, manipulate, and retrieve digital content
This topic leads to: ● Y2: Creating Media: Digital music ● Y2: Programming B: Programming quizzes	**This topic leads to:** ● Y3: Creating Media: desktop publishing ● Y3: Programming B: Events and actions in programs

Computing	**Autumn 1**	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
EYFS						

Year 1	Technology all around us	Digital Painting	Moving a robot	Grouping data	Digital Writing	Programming animations
Resources	Chromebooks	Chromebooks/ ipads	Beebots	Chromebooks/ ipads	Chromebooks/ ipads	Chromebooks/ ipads
Year 2	Information technology around us	Digital Photography	Robot algorithms	Pictograms	Digital Music	Programming quizzes
Resources		Chromebooks/ ipads	Beebots	Chromebooks/ ipads	Chromebooks/ ipads	Chromebooks/ ipads