Farsley Springbank Primary School
Computing progression of skills

	Online Safety
Reception	I can recognise that I can say 'no' / 'please stop' / 'I'll tell' / 'I'll ask' to somebody who asks me to do something that makes me feel sad, embarrassed or upset. To be able to communicate using technology I can recognise some ways in which the internet can be used to communicate. I can give examples of how I (might) use technology to communicate with people I know. To understand online vs offline technology use To understand what it means to be unkind online I can describe ways that some people can be unkind online. I can offer examples of how this can make others feel. To understand how to keep information private
Year 1	I can recognise that there may be people online who could make someone feel sad, embarrassed or upset. I can give examples of when I should ask permission to do something online and explain why this is important. I can give examples of when I should ask permission to do something online and explain why this is important. 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. I can explain rules to keep myself safe when using technology both in and beyond the home. I can explain how passwords are used to protect information, accounts and devices I can explain why work I create using technology belongs to me
Year 2	I can give examples of issues online that might make someone feel sad, worried, uncomfortable or frightened I can give examples of how someone might use technology to communicate with others they don't also know offline and explain why this might be risky I know who to talk to if something has been put online without consent or if it is incorrect I can use simple keywords in search engines I can explain simple guidance for using technology in different environments and settings I can explain and give examples of what is meant by 'private' and 'keeping things private'. I can recognise that content on the internet may belong to other people.
Year 3	I can explain what is meant by the term 'identity'. I can explain what it means to 'know someone' online and why this might be different from knowing someone offline. I can give examples of what anyone may or may not be willing to share about themselves online. I can explain what autocomplete is and how to choose the best suggestion. I can explain why some online activities have age restrictions, why it is important to follow them and know who I can talk to if others pressure me to watch or do something online that makes me feel uncomfortable I can describe how connected devices can collect and share anyone's information with others. I can explain why copying someone else's work from the internet without permission isn't fair and can explain what problems this might cause.
Year 4	I can explain how my online identity can be different to my offline identity.

	I can describe strategies for safe and fun experiences in a range of online social environments I can describe how to find out information about others by searching online. I can explain the difference between a 'belief', an 'opinion' and a 'fact and can give examples of how and where they might be shared online, e.g. in videos, memes, posts, news stories etc. I can explain that not all opinions shared may be accepted as true or fair by others (e.g. monsters under the bed). I can explain how using technology can be a distraction from other things, in both a positive and negative way. can describe strategies for keeping personal information private, depending on context. I can explain what a strong password is and demonstrate how to create one.
Year 5	I can explain how identity online can be copied, modified or altered. I can give examples of technology specific forms of communication (e.g. emojis, memes and gifs). I can search for information about an individual online and summarise the information found. I can explain what is meant by 'being sceptical'; I can give examples of when and why it is important to be 'sceptical'. I can evaluate digital content and can explain how to make choices about what is trustworthy e.g. differentiating between adverts and search results. I can explain key concepts including: information, reviews, fact, opinion, belief, validity, reliability and evidence. I can explain how and why some apps and games may request or take payment for additional content (e.g.in-app purchases, lootboxes) and explain the importance of seeking permission from a trusted adult before purchasing. I can explain how and why some apps and games may request or take payment for additional content (e.g.in-app purchases, lootboxes) and explain the importance of seeking permission from a trusted adult before purchasing.
Year 6	I can describe issues online that could make anyone feel sad, worried, uncomfortable or frightened. I know and can give examples of how to get help, both on and offline. I can explain the importance of asking until I get the help needed. I can describe how to be kind and show respect for others online including the importance of respecting boundaries regarding what is shared about them online and how to support them if others do not. I can explain the ways in which anyone can develop a positive online reputation. I can describe how some online information can be opinion and can offer examples. I can explain how and why some people may present 'opinions' as 'facts'; why the popularity of an opinion or the personalities of those promoting it does not necessarily make it true, fair or perhaps even legal. I can define the terms 'influence', 'manipulation' and 'persuasion' and explain how someone might encounter these online (e.g. advertising and 'ad targeting' for fake news). I recognise and can discuss the pressures that technology can place on someone and how / when they could manage this. I can describe ways in which some online content targets people to gain money or information illegally; I can describe strategies to help me identify such content (e.g. scams, phishing).

	Computing systems
Reception	- Digital Literacy and Information Technology - Learning about the main parts of a computer and how to use the keyboard and mouse. Logging in and out.
Year 1	-To identify technology -To identify a computer and its main parts -To use a mouse in different ways -To use a keyboard to type on a computer

	-To use the keyboard to edit text -To create rules for using technology responsibly
Year 2	-To recognise the uses and features of information technology -To identify the uses of information technology in the school -To identify information technology beyond school -To explain how information technology helps us -To explain how to use information technology safely -To recognise that choices are made when using information technology
Year 3	-To explain how digital devices function -To identify input and output devices -To recognise how digital devices can change the way we work -To explain how a computer network can be used to share information -To explore how digital devices can be connected -To recognise the physical components of a network
Year 4	To describe how networks physically connect to other networks -To recognise how networked devices make up the internet -To outline how websites can be shared via the World Wide Web (WWW) -To describe how content can be added and accessed on the World Wide Web (WWW) -To recognise how the content of the WWW is created by people -To evaluate the consequences of unreliable content
Year 5	-To compare paper and computer-based databases -To outline how you can answer questions by grouping and then sorting data -To explain that tools can be used to select specific data -To explain that computer programs can be used to compare data visually -To use a real-world database to answer questions
Year 6	-To explain the importance of internet addresses -To recognise how data is transferred across the internet -To explain how sharing information online can help people to work together -To evaluate different ways of working together online -To recognise how we communicate using technology -To evaluate different methods of online communication

	Programming
Reception	The children learn to receive and give instructions and understand the importance of precise instructions Children learn about directions, experiment with programming a Bee-bot/Blue-bot and tinker with hardware -
Year 1	-To explain what a given command will do -To act out a given word -To combine forwards and backwards commands to make a sequence -To combine four direction commands to make sequences -To plan a simple program

	-To find more than one solution to a problem
Year 2	-To explain that a sequence of commands has a start -To explain that a sequence of commands has an outcome -To create a program using a given design -To change a given design -To create a program using my own design -To decide how my project can be improved
Year 3	-To explore a new programming environment -To identify that commands have an outcome -To explain that a program has a start -To recognise that a sequence of commands can have an order -To change the appearance of my project -To create a project from a task description
Year 4	-To identify that accuracy in programming is important -To create a program in a text-based language -To explain what 'repeat' means -To modify a count-controlled loop to produce a given outcome -To decompose a task into small steps -To create a program that uses count-controlled loops to produce a given outcome
Year 5	- Connecting micro:bits - Beginning to program the micro:bits - Understanding Variables - Creating and using variables - Debugging - If, then statements
Year 6	Variables in games - To define a variable as something that is changeable - To explain why a variable is used in a program - To choose how to improve a game by using variables - To design a project that builds on a given example - To use my design to create a project - To evaluate my project

	Creating media
Reception	The children learn to receive and give instructions and understand the importance of precise instructions Children learn about directions, experiment with programming a Bee-bot/Blue-bot and tinker with hardware -
Year 1	-To use a computer to write -To add and remove text on a computer -To identify that the look of text can be changed on a computer

	-To make careful choices when changing text -To explain why I used the tools that I chose -To compare typing on a computer to writing on paper
Year 2	-To use a digital device to take a photograph -To make choices when taking a photograph -To describe what makes a good photograph -To decide how photographs can be improved -To use tools to change an image -To recognise that photos can be changed
Year 3	-To explain that animation is a sequence of drawings or photographs -To relate animated movement with a sequence of images -To plan an animation -To identify the need to work consistently and carefully -To review and improve an animation -To evaluate the impact of adding other media to an animation
Year 4	-To explain that the composition of digital images can be changed -To explain that colours can be changed in digital images -To explain how cloning can be used in photo editing -To explain that images can be combined -To combine images for a purpose -To evaluate how changes can improve an image
Year 5	-To identify that drawing tools can be used to produce different outcomes -To create a vector drawing by combining shapes -To use tools to achieve a desired effect -To recognise that vector drawings consist of layers -To group objects to make them easier to work with -To apply what I have learned about vector drawings
Year 6	-To review an existing website and consider its structure -To plan the features of a web page -To consider the ownership and use of images (copyright) -To recognise the need to preview pages -To outline the need for a navigation path -To recognise the implications of linking to content owned by other people

	Data and information
Reception	-
Year 1	-To label objects -To identify that objects can be counted -To describe objects in different ways -To count objects with the same properties -To compare groups of objects

	-To answer questions about groups of objects
Year 2	-To recognise that we can count and compare objects using tally charts -To recognise that objects can be represented as pictures -To create a pictogram -To select objects by attribute and make comparisons -To recognise that people can be described by attributes -To explain that we can present information using a computer
Year 3	-To create questions with yes/no answers -To identify the attributes needed to collect data about an object -To create a branching database -To explain why it is helpful for a database to be well structured -To plan the structure of a branching database -To independently create an identification tool
Year 4	-To explain that data gathered over time can be used to answer questions -To use a digital device to collect data automatically -To explain that a data logger collects 'data points' from sensors over time -To recognise how a computer can help us analyse data -To identify the data needed to answer questions -To use data from sensors to answer questions
Year 5	-To use a form to record information -To compare paper and computer-based databases -To outline how you can answer questions by grouping and then sorting data -To explain that tools can be used to select specific data -To explain that computer programs can be used to compare data visually -To use a real-world database to answer questions
Year 6	-To create a data set in a spreadsheet -To build a data set in a spreadsheet -To explain that formulas can be used to produce calculated data -To apply formulas to data -To create a spreadsheet to plan an event -To choose suitable ways to present data