Computing			
Cycle 1	Term 1	Term 2	Term 3
Class 2 (Years 2 and 3)	**Revisit Online Safety** Children are introduced to email and other forms of online communication. They will look at how to write and send emails, as well as how to decide if an email is safe to open. They will build on their existing knowledge of cyberbullying and how to deal with unkind behaviour online. The use and importance of privacy settings is introduced and children will discuss the types of information we should not share online. They will build on the idea of a digital footprint by thinking about how the adverts they see online are targeted at them. **Computing systems and networks – IT around us** How is information technology (IT) being used for good in our lives? With an initial focus on IT in the home, children explore how IT benefits society in places such as shops, libraries, and hospitals. Whilst discussing the responsible use of technology, and how to make smart choices when using it.	**Creating media – Digital photography** Children will learn to recognise that different devices can be used to capture photographs and will gain experience of capturing, editing, and improving photos. Finally, they will use this knowledge to recognise that images they see may not be real.	**Programming A – Robot algorithms** This unit develops Children' understanding of instructions in sequences and the use of logical reasoning to predict outcomes. Children will use given commands in different orders to investigate how the order affects the outcome. They will also learn about design in programming. They will develop artwork and test it for use in a program. They will design algorithms and then test those algorithms as programs and debug them.
	Computing systems and networks – Connecting computers We will challenge children to develop their understanding of digital devices, with an initial focus on inputs, processes, and outputs. We start by comparing digital and non-digital devices, before introducing them to computer networks that include network infrastructure and devices like routers and switches.	**Creating media - Stop-frame animation** Children will use a range of techniques to create a stop-frame animation using tablets. Next, they will apply those skills to create a story-based animation. This unit will conclude with children adding other types of media to their animation, such as music and text.	**Programming A - Sequencing sounds** This unit explores the links between events and actions, whilst consolidating prior learning relating to sequencing. Children will begin by moving a sprite in four directions (up, down, left and right). They will then explore movement within the context of a maze, using design to choose an appropriately sized sprite. This unit also introduces programming extensions, through the use of pen blocks. Children are given the opportunity to draw lines with sprites and change the size and colour of lines. The unit concludes with children designing and coding their own maze tracing program.

Cycle 2	**Data and information – Pictograms** This unit introduces the children to the term 'data'. Children will begin to understand what data means and how this can be collected in the form of a tally chart. They will learn the term 'attribute' and use this to help them organise data. They will then progress onto presenting data in the form of pictograms and finally block diagrams. Children will use the data presented to answer questions.	**Creating media - Digital music** Children will explore how music can make them think and feel. They will make patterns and use those patterns to make music with both percussion instruments and digital tools. They will also create different rhythms and tunes, using the movement of animals for inspiration. Finally, Children will share their creations and compare creating music digitally and non-digitally.	**Programming - Programming quizzes** This unit initially recaps on learning from the Year 1 Scratch Junior unit 'Programming B – 'Programming animations. Children begin to understand that sequences of commands have an outcome and make predictions based on their learning. They use and modify designs to create their own quiz questions in ScratchJr and realise these designs in ScratchJr using blocks of code. Finally, Children evaluate their work and make improvements to their programming projects.
	Data and information – Branching databases Children will develop their understanding of what a branching database is and how to create one. They will use yes/no questions to gain an understanding of what attributes are and how to use them to sort groups of objects. Children will create physical and on-screen branching databases. To conclude the unit, they will create an identification tool using a branching database, which they will test by using it. They will also consider real-world applications for branching databases.	**Creating media – Desktop publishing** During this unit, children will become familiar with the terms 'text' and 'images' and understand that they can be used to communicate messages. They will use desktop publishing software and consider careful choices of font size, colour and type to edit and improve premade documents. Children will be introduced to the terms 'templates', 'orientation', and 'placeholders' and begin to understand how these can support them in making their own template for a magazine front cover. They will start to add text and images to create their own pieces of work using desktop publishing software. Children will look at a range of page layouts thinking carefully about the purpose of these and evaluate how and why desktop publishing is used in the real world.	**Programming - Events and actions in programs** This unit explores the links between events and actions, whilst consolidating prior learning relating to sequencing. Children will begin by moving a sprite in four directions (up, down, left and right). They will then explore movement within the context of a maze, using design to choose an appropriately sized sprite. This unit also introduces programming extensions, through the use of pen blocks. Children are given the opportunity to draw lines with sprites and change the size and colour of lines. The unit concludes with children designing and coding their own maze tracing program.