Computing Overview 2022-2023

Online Safety is paramount to our computing curriculum.

In the Autumn term, the children learn the SMART rules through Key Stage assemblies.

In the Spring term, school hold a Safer Internet day and follow the content from the Kapow scheme of learning.

At the start of each lesson which involves online activity, the children are reminded of the safe use and what to do if issues arise.

Year group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
1		Programming – RODOCODO - Use the walk command - Include the rotate command - Add the 'Pick up' command	Creating media- Digital imagery - Plan a mini adventure story - Take photos holding the device steady - Edit, crop and filter photos	Programming – RODOCODO - Know programs contain bugs - Understand what a loop is and how they are used - Understand what a function is and how they are used	Creating media- Stop Motion - Use greater control when taking photos (light and angle) - Know animation is a sequence of photos	Intro to data- Statistics - Learn how charts and graphs can be created using a computer - Know a branching database is a way of classifying
2		- Write a program to include walk, rotate and pick up commands		- Develop pattern recognition skills		

		- Begin to use debugging skills - Begin to use loops toimprove programs		- Use pattern recognition to use loops - Develop debugging skills	- Learn small changes in frames create a smoother animation	- Know computers understand different types of input
3/4		Programming RODOCODO Year 3 - Continue to use pattern recognition to use loops effectively - Use pattern recognition to use functions - Understand there are systematic ways of finding and fixing bugs Year 4 - Describe 3 step process used when debugging - Learn what nested loops are and how to use them - Learn what if statements are	Programming Scratch - Know Scratch is a programming language - Understand how decomposition is used - Know you can remix and adapt code	Creating Media Video Trailers - Know different types of camera shots affect the photo/video - Learn how to edit using editing software - Understand how to add transitions and text	Creating Media- Website design - Know a website is a collection of connected pages - Understand homepage, subpage and hyperlinks - Work collaboratively to create content for a webpage	Programming – Computational thinking - Learn that problems can be solved through computational thinking - Understand 'pattern recognition' and 'abstraction' - Create algorithms for a specific purpose

		and how to use them				
5/6	Programming Music (see music planning)	Programming RODOCODO **Year 5** - Continue to develop understanding of functions and loops - Learn the difference between repeat until loops and counting loops - Learn what variables are and how to use them. **Year 6** - Learn what if esle statements are and how to use them - Continue to learn what variables are and how to use them	Computing systems and networks Search Engines - Know how search engines work - Learn that not everything online is true and how to check validity - Understand 'copyright.'	Data Handling Big Data 1 - Know data contained in barcodes and QR codes can be used by a computer - Understand how data is transmitted - Learn that data is often encrypted.	Data Handling Big Data 2 - Know data can be corrupted - Learn that devices that are not updated are most vulnerable - Understand the difference between mobile data and WiFi	Creating Media Stop motion - Know decomposition of an idea is important when creating stop motion - Understand stop motion is an animation filmed one frame at a time - Learn that editing is an important feature

		- Continue to learn what repeat until loops are and how to use them.				