Computing LKS2

Throughout the year the children will cover a variety of aspects of the computing curriculum to ensure all children:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology.

Autumn 1	**Online Safety: Self-image and Identity** **Branching Databases (Y3)** • 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
Autumn 2	**Online Safety: Online relationships & online reputation** **Stop-frame Animation(Y3)** • 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
Spring 1	**Online Safety: Managing online information** **Events and actions (Scratch) (**Y3) • To explain how a sprite moves in an existing project • To create a program to move a sprite in four directions

	• To adapt a program to a new context • To develop my program by adding features • To identify and fix bugs in a program • To design and create a maze-based challenge
Spring 2	**Online Safety: Health, Wellbeing, Lifestyle** **Data logging** (data loggers) (Y4) • 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
Summer 1	**Online Safety: Privacy & security** **Audio editing** (Y4) • To identify that sound can be recorded • To explain that audio recordings can be edited • To recognise the different parts of creating a podcast project • To apply audio editing skills independently • To combine audio to enhance my podcast project • To evaluate the effective use of audio
Summer 2	**Online Safety: Copyright & ownership** **Repetition in games** (Scratch) (Y4) • To develop the use of count-controlled loops in a different programming environment • To explain that in programming there are infinite loops and count-controlled loops • To develop a design that includes two or more loops which run at the same time • To modify an infinite loop in a given program • To design a project that includes repetition • To create a project that includes repetition