Curriculum Map

Y3 - Robins Class

	At the end of each unit, children will be able to:					
	Lesson 1	**Lesson 2**	**Lesson 3**	**Lesson 4**	**Lesson 5**	**Lesson 6**
Computing Systems - Connecting Computers	**Explain how digital devices function** • explain that digital devices accept inputs • explain that digital devices produce outputs • follow a process	**Identify input and output devices** • classify input and output devices • describe a simple process • design a digital device	**Recognise how digital devices can change the way that we work** • explain how I use digital devices for different activities • recognise similarities between using digital devices and using non-digital tools • suggest differences between using digital devices and using non-digital tools	**Explain how a computer network can be used to share information** • recognise different connections • explain how messages are passed through multiple connections • discuss why we need a network switch	**Explore how digital devices can be connected** • recognise that a computer network is made up of a number of devices • demonstrate how information can be passed between devices • explain the role of a switch, server, and wireless access point in a network	**Recognise the physical components of a network** • identify how devices in a network are connected together • identify networked devices around me • identify the benefits of computer networks
Creating Media - Stop-Frame Animation	**Explain that animation is a sequence of drawings or photographs** • draw a sequence of pictures • create an effective flip book—style animation • explain how an animation/flip book works	**Relate animated movement with a sequence of images** • predict what an animation will look like • explain why little changes are needed for each frame • create an effective stop-frame animation	**Plan an animation** • break down a story into settings, characters and events • describe an animation that is achievable on screen • create a storyboard	**Identify the need to work consistently and carefully** • use onion skinning to help me make small changes between frames • review a sequence of frames to check my work • evaluate the quality of my animation	**Review and improve an animation** • explain ways to make my animation better • evaluate another learner's animation • improve my animation based on feedback	**Evaluate the impact of adding other media to an animation** • add other media to my animation • explain why I added other media to my animation • evaluate my final film

Programming A - Sequencing Sounds	**Explore a new programming environment** • identify the objects in a Scratch project (sprites, backdrops) • explain that objects in Scratch have attributes (linked to) • recognise that commands in Scratch are represented as blocks	**Identify that commands have an outcome** • identify that each sprite is controlled by the commands I choose • choose a word which describes an on-screen action for my plan • create a program following a design	**Explain that a program has a start** • start a program in different ways • create a sequence of connected commands • explain that the objects in my project will respond exactly to the code	**Recognise that a sequence of commands can have an order** • explain what a sequence is • combine sound commands • order notes into a sequence	**Change the appearance of my project** • build a sequence of commands • decide the actions for each sprite in a program • make design choices for my artwork	**Create a project from a task description** • identify and name the objects I will need for a project • relate a task description to a design • implement my algorithm as code
Data and Information - Branching Databases	**Create questions with yes/no answers** • investigate questions with yes/no answers • make up a yes/no question about a collection of objects • create two groups of objects separated by one attribute	**Identify the attributes needed to collect data about an object** • select an attribute to separate objects into groups • create a group of objects within an existing group • arrange objects into a tree structure	**Create a branching database** • select objects to arrange in a branching database • group objects using my own yes/no questions • test my branching database to see if it works	**Explain why it is helpful for a database to be well structured** • create yes/no questions using given attributes • compare two branching database structures • explain that questions need to be ordered carefully to split objects into similarly sized groups	**Plan the structure of a branching database** • independently create questions to use in a branching database • create questions that will enable objects to be uniquely identified • create a physical version of a branching database	**Independently create an identification tool** • create a branching database that reflects my plan • work with a partner to test my identification tool • suggest real-world uses for branching databases
Creating Media - Desktop Publishing	**Recognise how text and images convey information** • explain the difference between text and images • recognise that text and images can communicate messages clearly • identify the advantages and disadvantages of using text and images	**Recognise that text and layout can be edited** • change font style, size, and colours for a given purpose • edit text • explain that text can be changed to communicate more clearly	**Choose appropriate page settings** • explain what 'page orientation' means • recognise placeholders and say why they are important • create a template for a particular purpose	**Add content to a desktop publishing publication** • choose the best locations for my content • paste text and images to create a magazine cover • make changes to content after I've added it	**Consider how different layouts can suit different purposes** • identify different layouts • match a layout to a purpose • choose a suitable layout for a given purpose	**Consider the benefits of desktop publishing** • identify the uses of desktop publishing in the real world • say why desktop publishing might be helpful • compare work made on desktop publishing to work created by hand

Programming B - Events and Actions in programs	**Explain how a sprite moves in an existing project** •explain the relationship between an event and an action • choose which keys to use for actions and explain my choices • identify a way to improve a program	**Create a program to move a sprite in four directions** • choose a character for my project • choose a suitable size for a character in a maze • program movement	**Adapt a program to a new context** • use a programming extension • consider the real world when making design choices • choose blocks to set up my program	**Develop my program by adding features** • identify additional features (from a given set of blocks) • choose suitable keys to turn on additional features • build more sequences of commands to make my design work	**Identify and fix bugs in a program** • test a program against a given design • match a piece of code to an outcome • modify a program using a design	**Design and create a maze-based challenge** • make design choices and justify them • implement my design • evaluate my project
E-safety	Know the rules around safe gaming online, including not sharing personal information. Know that there are options, such as reporting and blocking people, when things go wrong. Understand how to use tools such as Hector and TAG to report issues.		Know that some websites may not be trustworthy, in terms of the information they share and gather. Evaluate the validity of statements relating to online safety; Recognise potential risks associated with browsing online; Give examples of strategies for safe browsing online.		Be aware of issues around cyberbullying, inlcudingt heir own responsibility to only say things online they would be prepared to say in real life. Show awareness that not everyone they meet in internet chartrooms may be who they say they are.	
Vocab	**Unit 1 -** Input Input device Output Output device Loop Digital device Computer system Network switch	**Unit 2 -** Stop frame Sequence Review and improve Frame Setting Onion skinning	**Unit 3 -** Command Outcome Program Connected commands Sound commands Backdrop	**Unit 4 -** Tree structure Branching database Physical Digital Structure	**Unit 5 -** Desktop publishing Font Toolbar Layout Page Orientation Template	**Unit 6 -** Event Action Sprite Debug Modify Maze-based challenge