Year 3 Computing Curriculum Map

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing Systems and Networks – Connecting computers	**Creating Media – stop frame animation**	**Programming A - Sequencing sounds**	**Data and information – Branching databases**	**Creating media – Desktop publishing**	**Programming B - Events and actions in programs**
Lesson 1: To explain how digital devices function. • I can explain that digital devices accept inputs • I can explain that digital devices produce outputs • I can follow a process	**Lesson 1: To explain that animation is a sequence of drawings or photographs** • I can draw a sequence of pictures • I can create an effective flip book—style animation • I can explain how an animation/flip book works	**Lesson 1: To explore a new programming environment** • I can explain that objects in Scratch have attributes (linked to) • I can identify the objects in a Scratch project (sprites, backdrops) • I can recognise that commands in Scratch are represented as blocks	**Lesson 1: I can create questions with yes/no answers** • I can create two groups of objects separated by one attribute • I can investigate questions with yes/no answers • I can make up a yes/no question about a collection of objects	**Lesson 1: To recognise how text and images convey information** • I can explain the difference between text and images • I can identify the advantages and disadvantages of using text and images • I can recognise that text and images can communicate messages clearly	**Lesson 1: To explain how a sprite moves in an existing project** • I can choose which keys to use for actions and explain my choices • I can explain the relationship between an event and an action • I can identify a way to improve a program
Lesson 2: To identify input and output devices. • I can classify input and output devices • I can design a digital device • I can describe a simple process	**Lesson 2: To relate animated movement with a sequence of images** • I can create an effective stop-frame animation • I can explain why little changes are needed for each frame • I can predict what an animation will look like	**Lesson 2: To identify that commands have an outcome** • I can choose a word which describes an on-screen action for my plan • I can create a program following a design • I can identify that each sprite is controlled by the commands I choose	**Lesson 2: To identify the attributes needed to collect data about an object** • I can arrange objects into a tree structure • I can create a group of objects within an existing group • I can select an attribute to separate objects into groups	**Lesson 2: To recognise that text and layout can be edited** • I can change font style, size, and colours for a given purpose • I can edit text • I can explain that text can be changed to communicate more clearly	**Lesson 2: To create a program to move a sprite in four directions** • I can choose a character for my project • I can choose a suitable size for a character in a maze • I can program movement

Lesson 3: To recognise how digital devices can change the way we work. • I can explain how I use digital devices for different activities • I can recognise similarities between using digital devices and non-digital tools • I can suggest differences between using digital devices and non-digital tools	**Lesson 3: To plan an animation** • I can break down a story into settings, characters and events • I can create a storyboard • I can describe an animation that is achievable on screen	**Lesson 3: To explain that a program has a start** • I can create a sequence of connected commands • I can explain that the objects in my project will respond exactly to the code • I can start a program in different ways	**Lesson 3: To create a branching database** • I can group objects using my own yes/no questions • I can select objects to arrange in a branching database • I can test my branching database to see if it works	**Lesson 3: To choose appropriate page settings** • I can create a template for a particular purpose • I can define the term 'page orientation' • I can recognise placeholders and say why they are important	**Lesson 3: To adapt a program to a new context** • I can choose blocks to set up my program • I can consider the real world when making design choices • I can use a programming extension
Lesson 4: To explain how a computer network can be used to share information. • I can recognise different connections • I can explain how messages are passed through multiple connections • I can discuss why we need a network switch	**Lesson 4: To identify the need to work consistently and carefully** ality of my animation I can frames to check my work ng to help me make small nes	**Lesson 4: To recognise that a sequence of commands can have an order** • I can combine sound commands • I can explain what a sequence is • I can order notes into a sequence	**Lesson 4: To explain why it is helpful for a database to be well structured** • I can compare two branching database structures • I can create yes/no questions using given attributes • I can explain that questions need to be ordered carefully to split objects into similarly sized groups	**Lesson 4: To add content to a desktop publishing publication** • I can choose the best locations for my content • I can make changes to content after I've added it • I can paste text and images to create a magazine cover	**Lesson 4: To develop my program by adding features** • I can build more sequences of commands to make my design work • I can choose suitable keys to turn on additional features • I can identify additional features (from a given set of blocks)
Lesson 5: To explore how digital devices can be connected.	**Lesson 5: To review and improve an animation**	**Lesson 5: To change the appearance of my project** • I can build a sequence of commands	**Lesson 5: To plan the structure of a branching databases**	**Lesson 5: To consider how different layouts can suit different purposes**	**Lesson 5: To identify and fix bugs in a program** • I can match a piece of code to an outcome

• I can recognise that a computer network is made up of a number of devices • I can demonstrate how information can be passed between devices • I can explain the role of a switch, server, and wireless access point in a network	• I can evaluate another learners animation • I can explain ways to make my animation better • I can improve my animation based on feedback	• I can decide the actions for each sprite in a program • I can make design choices for my artwork	• I can create a physical version of a branching database • I can create questions that will enable objects to be uniquely identified • I can independently create questions to use in a branching database	• I can choose a suitable layout for a given purpose • I can identify different layouts • I can match a layout to a purpose	• I can modify a program using a design • I can test a program against a given design
Lesson 6: To recognise the physical components of a network. • I can identify how devices in a network are connected together • I can identify networked devices around me • I can identify the benefits of computer networks	**Lesson 6: To evaluate the impact of adding other media to an animation** • I can add other media to my animation • I can evaluate my final film • I can explain why I added other media to my animation	**Lesson 6: To create a project from a task description** • I can identify and name the objects I will need for a project • I can implement my algorithm as code • I can relate a task description to a design	**Lesson 6: To independently create an identification tool** • I can create a branching database that reflects my plan • I can suggest real-world uses for branching databases • I can work with a partner to test my identification tool	**Lesson 6: To consider the benefits of desktop publishing** • I can compare work made on desktop publishing to work created by hand • I can identify the uses of desktop publishing in the real world • I can say why desktop publishing might be helpful	**Lesson 6: To design and create a maze-based challenge** • I can evaluate my project • I can implement my design • I can make design choices and justify them