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| **Year 3 Overview** |
| **Unit Name** | **Lesson** | **Learning Objectives** | **Success Criteria** | **Cross Curricular Links** |
| **Autumn 1** |
| Computing systems and networks – Connecting computers | 1 | Can I 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 |   |
| Computing systems and networks – Connecting computers | 2 | Can I identify input and output devices? |  -I can classify input and output devices- I can describe a simple process- I can design a digital device |   |
| Computing systems and networks – Connecting computers | 3 | Can I 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 |   |
| Computing systems and networks – Connecting computers | 4 | Can I explain how a computer network can be used to share information? |  -I can discuss why we need a network switch- I can explain how messages are passed through multiple connections- I can recognise different connections |   |
| Computing systems and networks – Connecting computers | 5 | Can I explore how digital devices can be connected? |  -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 recognise that a computer network is made up of a number of devices |   |
| Computing systems and networks – Connecting computers | 6 | Can I 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 |   |
| **Autumn 2** |
| Creating media - Stop-frame animation | 1 | Can I explain that animation is a sequence of drawings or photographs? |  -I can create an effective flip book—style animation- I can draw a sequence of pictures- I can explain how an animation/flip book works |   |
| Creating media - Stop-frame animation | 2 | Can I 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 |   |
| Creating media - Stop-frame animation | 3 | Can I 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 |   |
| Creating media - Stop-frame animation | 4 | Can I identify the need to work consistently and carefully? |  -I can evaluate the quality of my animation- I can review a sequence of frames to check my work- I can use onion skinning to help me make small changes between frames |   |
| Creating media - Stop-frame animation | 5 | Can I review and improve an animation? |  -I can evaluate another learner’s animation- I can explain ways to make my animation better- I can improve my animation based on feedback |   |
| Creating media - Stop-frame animation | 6 | Can I 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 |   |
| **Spring 1** |
| Programming A - Sequencing sounds | 1 | Can I 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 |   |
| Programming A - Sequencing sounds | 2 | Can I 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 |   |
| Programming A - Sequencing sounds | 3 | Can I 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 |   |
| Programming A - Sequencing sounds | 4 | Can I 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 |   |
| Programming A - Sequencing sounds | 5 | Can I change the appearance of my project? |  -I can build a sequence of commands- I can decide the actions for each sprite in a program- I can make design choices for my artwork |   |
| Programming A - Sequencing sounds | 6 | Can I 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 |   |
| **Spring 2** |
| Data and information – Branching databases | 1 | Can I 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 |   |
| Data and information – Branching databases | 2 | Can I 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 |   |
| Data and information – Branching databases | 3 | Can I 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 |   |
| Data and information – Branching databases | 4 | Can I 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 |   |
| Data and information – Branching databases | 5 | Can I plan the structure of a branching database? |  -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  |   |
| Data and information – Branching databases | 6 | Can I 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 |   |
| **Summer 1** |
| Creating media – Desktop publishing | 1 | Can I 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 |   |
| Creating media – Desktop publishing | 2 | Can I 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 |   |
| Creating media – Desktop publishing | 3 | Can I 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 |   |
| Creating media – Desktop publishing | 4 | Can I 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 |   |
| Creating media – Desktop publishing | 5 | Can I consider how different layouts can suit different purposes? |  -I can choose a suitable layout for a given purpose- I can identify different layouts- I can match a layout to a purpose |   |
| Creating media – Desktop publishing | 6 | Can I 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 |   |
| **Summer 2** |
| Programming B - Events and actions in programs | 1 | Can I 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 |   |
| Programming B - Events and actions in programs | 2 | Can I 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 |   |
| Programming B - Events and actions in programs | 3 | Can I 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 |   |
| Programming B - Events and actions in programs | 4 | Can I 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) |   |
| Programming B - Events and actions in programs | 5 | Can I identify and fix bugs in a program? |  -I can match a piece of code to an outcome- I can modify a program using a design- I can test a program against a given design |   |
| Programming B - Events and actions in programs | 6 | Can I 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 |   |