



## YEAR 3

1. **COMPUTING SYSTEMS AND NETWORKS – Connecting computers**
2. **CREATING MEDIA – Stop-frame animation**
3. **PROGRAMMING A – Sequencing sounds**
4. **DATA AND INFORMATION – Branching databases**
5. **CREATING MEDIA – Desktop publishing**
6. **PROGRAMMING B - Events and actions in programs**

YEAR	STRAND	LESSON	PURPOSE	OUTCOMES
1	<b>COMPUTING SYSTEMS AND NETWORKS</b>  <b>CONNECTING COMPUTERS</b>	1	Explain how digital devices function <b>PAINTING PROGRAM</b>	Explain that digital devices accept inputs Explain that digital devices produce outputs Follow a process
1		2	Identify input and output devices <b>PAINTING PROGRAM</b>	Classify input and output devices Describe a simple process Design a digital device
1		3	Recognise how digital devices can change the way we work <b>PAINTING PROGRAM</b>	Explain how I use digital devices for different activities Recognise similarities in using digital devices and non-digital tools Suggest differences between using digital devices and non-digital tools
1		4	Explain how a computer network can be used to share information <b>PAINTING PROGRAM</b>	Discuss why we need a network switch Explain how messages are passed through multiple connections Recognise different connections
1		5	Explore how digital devices can be connected <b>PAINTING PROGRAM</b>	Demonstrate how information can be passed between devices Explain roles of a switch, server, and wireless access point in a network Recognise that a computer network is made up of a number of devices
1		6	Recognise the physical components of a network <b>PAINTING PROGRAM</b>	Identify how devices in a network are connected together Identify networked devices around me Identify the benefits of computer networks

YEAR	STRAND	LESSON	PURPOSE	OUTCOMES
1	<b>CREATING MEDIA</b>  <b>STOP-FRAME ANIMATION</b>	1	Explain that animation is a sequence of drawings or photographs <b>iMOTION/STOP MOTION ANIMATOR</b>	Create an effective flip book—style animation Draw a sequence of pictures Explain how an animation/flip book works
1		2	Relate animated movement with a sequence of images <b>iMOTION/STOP MOTION ANIMATOR</b>	Create an effective stop-frame animation Explain why little changes are needed for each frame Predict what an animation will look like
1		3	Plan an animation <b>iMOTION/STOP MOTION ANIMATOR</b>	Break down a story into settings, characters and events Create a storyboard Describe an animation that is achievable on screen
1		4	Identify the need to work consistently and carefully <b>iMOTION/STOP MOTION ANIMATOR</b>	Evaluate the quality of my animation Review a sequence of frames to check my work Use onion skinning to help me make small changes between frames
1		5	Review and improve an animation <b>iMOTION/STOP MOTION ANIMATOR</b>	Evaluate another learner's animation Explain ways to make my animation better Improve my animation based on feedback
1		6	Evaluate the impact of adding other media to an animation <b>iMOTION/STOP MOTION ANIMATOR</b>	Add other media to my animation Evaluate my final film Explain why I added other media to my animation

YEAR	STRAND	LESSON	PURPOSE	OUTCOMES
1	PROGRAMMING A  SEQUENCING SOUNDS	1	Explore a new programming environment  SCRATCH	Explain that objects in Scratch have attributes (linked to) Identify the objects in a Scratch project (sprites, backdrops) Recognise that commands in Scratch are represented as blocks
1		2	Identify that commands have an outcome  SCRATCH	Choose a word which describes an on-screen action for my plan Create a program following a design Identify that each sprite is controlled by the commands I choose
1		3	Explain that a program has a start  SCRATCH	Create a sequence of connected commands Explain that the objects in my project will respond exactly to the code Start a program in different ways
1		4	Recognise that a sequence of commands can have an order  SCRATCH	Combine sound commands Explain what a sequence is Order notes into a sequence
1		5	Change the appearance of my project  SCRATCH	Build a sequence of commands Decide the actions for each sprite in a program Make design choices for my artwork
1		6	Create a project from a task description  SCRATCH	Identify and name the objects I will need for a project Implement my algorithm as code Relate a task description to a design

YEAR	STRAND	LESSON	PURPOSE	OUTCOMES
1	DATA AND INFORMATION  BRANCHING DATABASES	1	Create questions with yes/no answers  J2DATA BRANCHING DATABASE	Create two groups of objects separated by one attribute Investigate questions with yes/no answers Make up a yes/no question about a collection of objects
1		2	Identify the attributes needed to collect data about an object  J2DATA BRANCHING DATABASE	Arrange objects into a tree structure Create a group of objects within an existing group Select an attribute to separate objects into groups
1		3	Create a branching database  J2DATA BRANCHING DATABASE	Group objects using my own yes/no questions Select objects to arrange in a branching database Test my branching database to see if it works
1		4	Explain why it is helpful for a database to be well structured  J2DATA BRANCHING DATABASE	Compare two branching database structures Create yes/no questions using given attributes Explain that questions need to split objects into similarly sized groups
1		5	Plan the structure of a branching database  J2DATA BRANCHING DATABASE	Create a physical version of a branching database Create questions that will enable objects to be uniquely identified Independently create questions to use in a branching database
1		6	Independently create an identification tool  J2DATA BRANCHING DATABASE	Create a branching database that reflects my plan Suggest real-world uses for branching databases Work with a partner to test my identification tool

YEAR	STRAND	LESSON	PURPOSE	OUTCOMES
1	<p><b>CREATING MEDIA</b></p> <p><b>DESKTOP PUBLISHING</b></p>	1	Recognise how text and images convey information <a href="https://www.canva.com/pages/open-office/">CANVA.COM/PAGES/OPEN OFFICE</a>	Explain the difference between text and images Identify the advantages and disadvantages of using text and images Recognise that text and images can communicate messages clearly
1		2	Recognise that text and layout can be edited <a href="https://www.canva.com/pages/open-office/">CANVA.COM/PAGES/OPEN OFFICE</a>	Change font style, size, and colours for a given purpose Edit text Explain that text can be changed to communicate more clearly
1		3	Choose appropriate page settings <a href="https://www.canva.com/pages/open-office/">CANVA.COM/PAGES/OPEN OFFICE</a>	Create a template for a particular purpose Define the term 'page orientation' Recognise placeholders and say why they are important
1		4	Add content to a desktop publishing publication <a href="https://www.canva.com/pages/open-office/">CANVA.COM/PAGES/OPEN OFFICE</a>	Choose the best locations for my content Make changes to content after I've added it Paste text and images to create a magazine cover
1		5	Consider how different layouts can suit different purposes <a href="https://www.canva.com/pages/open-office/">CANVA.COM/PAGES/OPEN OFFICE</a>	Choose a suitable layout for a given purpose Identify different layouts Match a layout to a purpose
1		6	Consider the benefits of desktop publishing <a href="https://www.canva.com/pages/open-office/">CANVA.COM/PAGES/OPEN OFFICE</a>	Compare work made on desktop publishing to work created by hand Identify the uses of desktop publishing in the real world Say why desktop publishing might be helpful

YEAR	STRAND	LESSON	PURPOSE	OUTCOMES
1	<p><b>PROGRAMMING B</b></p> <p><b>EVENTS AND ACTIONS IN PROGRAMS</b></p>	1	Explain how a sprite moves in an existing project <a href="https://scratch.mit.edu/">SCRATCH</a>	Choose which keys to use for actions and explain my choices Explain the relationship between an event and an action Identify a way to improve a program
1		2	Create a program to move a sprite in four directions <a href="https://scratch.mit.edu/">SCRATCH</a>	Choose a character for my project Choose a suitable size for a character in a maze Program movement
1		3	Adapt a program to a new context <a href="https://scratch.mit.edu/">SCRATCH</a>	Choose blocks to set up my program Consider the real world when making design choices Use a programming extension
1		4	Develop my program by adding features <a href="https://scratch.mit.edu/">SCRATCH</a>	Build more sequences of commands to make my design work Choose suitable keys to turn on additional features Identify additional features (from a given set of blocks)
1		5	Identify and fix bugs in a program <a href="https://scratch.mit.edu/">SCRATCH</a>	Match a piece of code to an outcome Modify a program using a design Test a program against a given design
1		6	Design and create a maze-based challenge <a href="https://scratch.mit.edu/">SCRATCH</a>	Evaluate my project Implement my design Make design choices and justify them