


Unit 	Lesson name	Lesson No.	Learning objective	Expected Standard (EXS)	Greater depth (GDS)
Animation	Introduction to Animation	1	To understand what animation is.	Children understand what animation is and can describe common techniques used to create it.	Children understand what animation is and can describe 2D, Stop Motion, and 3D animation techniques.
	Onion Skinning	2	To understand the term onion skinning and be able to use this technique for 2D computer animations.	They understand how onion skinning helps create smooth transitions by aligning objects between frames and can use this feature, along with copy-frame, to avoid abrupt endings in their own animations.	They confidently use the copy frame feature to avoid abrupt endings, sometimes customising these frames. Children plan effectively for animations, considering constraints like time. They can explain and use onion skinning to achieve smoother transitions between frames, while acknowledging its limitations.
	Enhancing a Simple Animation	3	To know how to enhance simple animations using animation software.	Children can add sound and backgrounds to their animations and apply these elements according to a storyboard planner to ensure clear sequencing.	They follow their plans to produce animations that include custom backgrounds and sound effects to enhance storytelling.
	Storyboarding an Animation	4	To plan an animation.	They can compare hand-drawn and software-based animations, using both a flick book and digital tools to explore differences.	They can compare the pros and cons of traditional versus computer animation methods and justify their preferences through creating both flick books and digital animations.
	Narrative Through Animation	5	To create a narrative through animation.	They recognize that animations are made from individual frames shown in sequence and that speed depends on frames per second.	They recognise that animations are made from sequential frames and that frame rate affects animation speed.
	Evaluating Animation	6	To evaluate animations.	To consider elements of their animation that has succeeded and elements that could be improved.	To be able to critically evaluate their work and the work of others.
Introduction to AI	What is Artificial Intelligence?	1	To understand what Artificial Intelligence is and some of the tasks it can carry out.	Children can explain AI as technology that learns from data to make predictions or create content. They correctly identify several AI tasks (such as finder, assistant, maker, personaliser, organiser) and give sensible examples.	Children show confident, detailed understanding across all lessons. They clearly explain how AI uses data to learn patterns and predict outcomes. Children categorise AI tasks accurately with well-chosen real-world examples.
	Writing AI Prompts	2	To learn to communicate effectively with AI tools by writing clear and precise prompts.	They define generative AI and understand that AI is not always right, so outputs should be checked. They write effective prompts that include a clear task, helpful details. They can refine prompts to improve results.	Their definition of generative AI is secure and they evaluate AI outputs thoughtfully. They are able to explain why errors or bias may occur. Children can create highly effective, precise prompts. They are able to refine their prompts independently to shape better responses.

	Digital Citizenship and AI	3	To learn how to be a good digital citizen when using AI.	Children demonstrate good digital citizenship by keeping personal information private, using AI kindly and thinking critically about trustworthiness.	Children are consistent with modelling excellent digital citizenship. They are able to discuss privacy, responsible behaviour, trust and wisdom in a range of ways.
	The Future of AI	4	To think about how AI might develop in the future.	They can describe realistic future uses of AI and explain that people control AI through human oversight.	Children propose imaginative yet plausible future AI uses, explaining automation benefits/risks and the need for human oversight.
Logo	Introduction to Logo	1	To know key commands and input simple instructions.	Children can read multi-step programs and accurately predict the outcome. They recognise that procedures make code more efficient and use them appropriately.	They can read and understand increasingly complex programs.
	Drawing Letters	2	To use a variety of commands to create shapes using multi-line mode.	When code doesn't work as expected, they may find and fix errors independently, though complex code might still require support.	They confidently use PU (pen up) and PD (pen down) commands to create specific drawing effects. When their code doesn't behave as expected, they apply logical reasoning and debugging techniques to find and fix errors independently.
	Change Line Colour and Thickness and use the Repeat Command	3	To use the Repeat command and change the line thickness and colour.	They can adapt instructions within repeat commands to create and refine common shapes, using procedures to improve efficiency. They understand the repeat command and can plan simple repeat structures rather than relying on trial-and-error. Children explore repeating procedures to create more complex patterns, showing some mathematical understanding.	They create and call procedures efficiently, understanding their value in making code clearer and avoiding repetition. Children experiment with repeating procedures to build more complex patterns, demonstrating their understanding of the mathematical ideas involved.
	Using Procedures	4	To use procedures to write instructions.	They plan sequences using two or more commands before running the code.	They can read and understand increasingly complex programs, including those with procedures within repeats, and accurately predict the outcome. Children enjoy challenging themselves by planning sequences with several commands before running the code to check the outcome.
Coding	Design, Code, Test and Debug	1	To create a simple computer program using coding structures previously encountered.	Children can independently design, code, test, and debug a simple program in 2Code. They can modify code to improve efficiency, such as using tags, and can explain how their program works using correct coding vocabulary.	Children demonstrate a secure and creative understanding of complex coding structures. They write efficient code using tags and conditions, adapting structure as needed. They debug logically, explain how different parts of the code interact, and suggest or implement improvements to optimise functionality. Their final programs include custom features and meet the intended goal without adult help.

	Selection	2	To know what selection means in computer programming.	They use selection ('if' and 'if/else' statements) to control outcomes.	They confidently use selection to build interactive, purposeful programs or games.
	Co-ordinates	3	To know how to use co-ordinates in computer programming.	They can use co-ordinates to place objects.	They confidently use co-ordinates to build interactive, purposeful programs or games.
	Looping Code	4	To explore methods that introduce loops in coding.	They use loops to simplify repetitive code.	They confidently use both 'repeat' and 'repeat until' loops to build interactive, purposeful programs or games.
	Number Variables	5	To understand what a variable is in programming.	They use variables, and timers confidently to control outcomes.	They confidently use variables (including scorekeeping) and randomisation, to build interactive, purposeful programs or games.
	Making a Playable Game	6	To create a game that keeps score.	Their programs are purposeful, and they show an understanding of how conditions affect which code is run.	They confidently use selection, variables (including scorekeeping).
Effective Searching	Searching the Internet	1	To understand what a search engine is, how it works and how to use simple keywords to find information online.	Children can explain what a search engine is, describe how it finds and shows results, and use clear keywords instead of full questions to get focused results.	Children can confidently explain in detail how search engines crawl, index, and rank results, including the roles of relevance, popularity, freshness, and advertising.
	Ranking Results	2	To understand how search engines collect, sort and rank results, and why some results appear first.	They understand that search engines rank results based on relevance, popularity, and sometimes paid adverts, and can explain why the first result might not always be the most reliable.	They compare results from different search engines, evaluate snippets critically, and can explain why some results appear higher than others.
	Advanced Searching and Filtering	3	To learn advanced ways to improve searches so we can find the most accurate and useful results quickly.	They can refine searches by using techniques like quotation marks, minus signs, and filters for type or date, and check snippets before clicking to choose the most useful link.	They are skilled at assessing the trustworthiness of online content, consistently identifying whether information is a fact, opinion, or belief, and explaining reasoning clearly. They independently choose and adapt precise keywords, using advanced search operators like quotation marks, minus signs, and filters.
	Can We Trust What We Find Online?	4	To develop strategies to judge whether information online is true and if sources can be trusted.	They can distinguish between facts, opinions, and beliefs, explain what fake news is, and use clues such as the source, date, and evidence from other sites to check reliability. They apply these skills with some independence, making thoughtful choices about which search results and sources to trust	They spot fake news by recognising unreliable sources, altered images, or unsupported claims, and cross-check with multiple trusted websites.
Composing Beats	Understanding Music	1	To identify and discuss the main elements of music.	Children show a secure grasp of the key learning from the unit and use Busy Beats with confidence. They understand pulse, rhythm, tempo, pitch, and melody, and explain how these elements affect a piece of music.	Children demonstrate confidence, creativity, and independence in Busy Beats. They use vocabulary such as pulse, rhythm, tempo, pitch, melody, and texture accurately in discussion. Their evaluations are detailed, showing curiosity about how digital tools support music-making.

	Rhythm and Tempo	2	To understand and experiment with rhythm and tempo.	They create clear rhythms, adjusting BPM to suit the mood, and use loops effectively to structure their work.	They show awareness of how BPM and pitch changes affect mood and use this knowledge to shape their compositions.
	Melody and Pitch	3	To create a melodic phrase using varied notes and pitch.	When making melodies, they select notes with awareness of pitch and explain the difference between high and low sounds.	Their recordings highlight strong structure, style, and originality, as well as a willingness to explore new ideas.
	Making Music	4	To compose a piece of electronic music.	They combine samples and synths thoughtfully, layering patches for texture, and record a complete piece of music. Their work shows creativity and control, and they reflect on their compositions, suggesting improvements with growing independence.	Their music often shows clear intention, layering rhythms and melodies across multiple patches for variety and impact. They can explain their choices like producers, considering whether to begin with a beat or melody and reflecting thoughtfully on outcomes.