Meadow Park: Curriculum Map 2021-2022

Key Stage	Year Group	Subject	Teacher	Programme of Study
KS3	7/8/9	Computing	Mr Dunn	National Curriculum (NCCE)

Autumn a	Autumn b	Spring a	Spring b	Summer a	Summer b
Topic(s)	Topic(s)	Topic(s)	Topic(s)	Topic(s)	Topic(s)
Year 7					
Online Safety/Representation	Vector graphic shapes/Animations objects	Introduction Programing	Introduction to Audiovisual	Programing and Decomposition	Developing for the Web
Understand the need to be safe online Be able to report concerns	Create rectangle, ellipse, polygon and star shapes with different properties	Investigating and predicting outcomes of a program, utilise an object orientated approach	Consider the application of 'pixels', 'resolution', and 'colour depth'	Employ decomposition, breaking a problems down into smaller, more manageable sub problems	Use HTML to structure static web pages Modify HTML tags using inline styling to improve the appearance of web pages
Code and un-code data strings	Add, remove, rotate and scale objects	Create a stages, custom editing sprites, apply and modify code sequences	Understand, explore and create optimized images using controls	Define and test out subroutines instructions that will run when called by the main program and (or) other subroutines	Apply HTML tags to construct a web page structure from a provided design
Year 8					
Using Technology/Binary Code	Vector graphic manipulation/Animation manipulation	Programing Variables	Audiovisual Operations	Programing Iteration	HTML and CSS
Demonstrate a range of ways to use technology safely, respectfully, responsibly, and securely, including protecting their online identity and privacy; Recognise inappropriate content, contact and conduct and know how to report concerns	Manipulate groups of objects by grouping, union, difference and intersection	Define variables, recognize control flows and trace variable values within sequences	Utilise arithmetic operations within digital representations	Identify where condition-controlled iteration can be used in a program	Assess the benefits of using CSS to style pages instead of in-line formatting
	Utilise edit mode, loop cut and face editing	Define conditions with selection uses	Assess creative benefits and ethical drawbacks of digital manipulation	Implement condition-controlled iteration in a program	Use CSS to style static web pages
Year 9					
Digital Artifacts /Binary Units	Vector graphic multi too, approach/Animation tools	Programing problem solving	Audiovisual Attributes	Programing for end users	Web Authoring and Search Technologies
Create, reuse, revise and repurpose digital artefacts for a given audience Consider trustworthiness, design and usability.	Combine multiple tools to create and manipulate vector graphics	Use repeated executed instructions, use count and controlled approaches, detect and correct errors	Use attributes such as sampling frequency and sample size affect characteristics	Decompose a larger problem into smaller sub problems. Apply appropriate constructs to solve a problem	Explore search technologies and the issues that arise by the way they function and the way they are used

Convert between different units and multiples of representation size	Add and edit set lighting, compare rendering modes	Independently design programing constructs	Employ appropriate software and combine them in order to solve more complex problems requiring sound manipulation	Create and model solutions that meet user requirements. Consider attention to trustworthiness, design, and usability	Implement navigation to complete a functioning website
Assessment Tasks	Assessment Tasks	Assessment Tasks	Assessment Tasks	Assessment Task	Assessment Tasks
Learners to complete a formative assessment (OPEN BOOK) evidence answering relevant learning challenges	Learners will create a range of final graphics using relevant software titles to meet specific criteria.	Learners will create a range of object orientated file types to demonstrate their learning journey	Learners will manipulate and create a range of audiovisual file evidence and demonstrate development iteration	Learners will create a range of file types to demonstrate their learning journey which will evidence composition	Learners will develop a range of coding scripts and evidence developments through screen shots and annotations
Role play scenarios and technology devices Discuss and share opinions Create an electronic portfolio	Learners will create a range of animation file types to show development and final product developments	Learners will answer written coding questions and solve challenge problems	Learners are asked to choose the best trip using survey data and then cost it.	Learners will answer written and verbal coding challenges and set questions	Learners will provide feedback to targeted and scaffolded questions
Personal Development/CEIAG	Personal Development/CEIAG	Personal Development/CEIAG	Personal Development/CEIAG	Personal Development/CEIAG	Personal Development/CEIAG
Understand how to communicate online and appreciate security and privacy	Understand how graphics can be used to communicate within target audiences	Appreciate how coding is intrinsic to input, process and outputs of everyday electronic products and devices	Understand how underlying principles of digital representations are applied in their own real settings	Learners will have started to consider other end user requirements and relate their own experiences	Learners will start to appreciate their own personal interactions with website coding and some of the processes that contribute to its development
Reading & Writing	Reading &Writing	Reading &Writing	Reading &Writing	Reading &Writing	Reading &Writing
Relate their own understanding to the technologies and good practice approaches	Learners will explore a range of technical literacy and utilise its application within their development phases	Learners will develop a new range of technical programing language terminology	Learners will develop a new range of technical literacy	Combine information from a range of sources	Describing key words and linking concepts
Speaking & Listening	Speaking & Listening	Speaking & Listening	Speaking & Listening	Speaking & Listening	Speaking & Listening
Communicate opinions and participate in discussions clearly and effectively.	Learners will be challenged to explain their technical literacy and pair share it	Learners will pair share experiences such as problem solving and embrace challenging scaffolded questioning	Round robins, class discussions alongside pair sharing will further facilitate knowledge and understanding	Small groups to determine how to solve teacher set problem scenarios.	Learners are to consider the assumptions and the context of solutions they have developed
Numeracy & Mathematical Reasoning	Numeracy & Mathematical Reasoning	Numeracy & Mathematical Reasoning	Numeracy & Mathematical Reasoning	Numeracy & Mathematical Reasoning	Numeracy & Mathematical Reasoning
Use spreadsheets to process numerical data and link into binary coding	Use numerical controls within the development of images and file outputs	Numerical functions within coding to control events and conditions	Numerical controls and calculations within audio visual applications	Represent a situation from the real world; analyse it using mathematical procedures, determining appropriate variables; interpret and evaluate the	Explore the effect of varying the values in their codes in relation to formatting
Creative Media	Creative Media	Creative Media	Creative Media	Creative Media	Creative Media
Desktop PCs/Whiteboard	Desktop PCs/Whiteboard/Graphical applications	Utilise online object orientated coding software	Utilise GIMP and audio editing applications	Object orientated coding software, games and quizzes	Online coding compliers and desktop PC software