

Home-School Learning Collaboration – Computing

Topics in this cycle: Scratch		Taught: Autumn 2	Year Group: 7
Key knowledge/concepts to be learnt ('Tell me about....')			Websites/blogs/YouTube links and further reading to deepen and consolidate learning
<ul style="list-style-type: none">What elements help create a strong password? Identify the difference between a backdrop and a sprite. Explain how to create a backdrop for a game using the tools in sprite.What is animation? Explain how animation works and how it can be used in a computer game. How to animate a sprite.What is a Conditional Statement? Identify the scratch blocks needed for a conditional statement. Explain what a conditional statement is. Explain how conditional statements allow games to be more realistic.How do I detect a collision in scratch? Identify the blocks used for collision detection. Explain why collision detection is used. Explain how collision detection allows games to be more realistic.What is a variable? Explain what a variable is. Identify the blocks used to create a variable. Explain how to use conditional statements and variables to allow a game to keep track of the score.			Notes/Information Scratch for Beginners Create & Learn Creating and Using Strong Passwords Microsoft Conditional Statements in Scratch Codingal Creating a Folder Microsoft Variables in Scratch Codingal Creating and Sending an Email Microsoft .
Key Vocabulary and Definitions To Be Learnt			What Will The Assessment Look Like?
Scratch Sprite	An image that can be programmed to move, respond to events, and interact with other sprites.		The assessment will consist of: <ul style="list-style-type: none">Block identification – Explain what the different Scratch programming blocks can do.
Backdrop	Another name for the background scene. It is at the back of the game and other elements of the program are added on top.		
Animation	a filmmaking technique where still images are manipulated to create the illusion of movement		

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Conditional Statement	Conditional statements help you to make a decision based on certain conditions.	<ul style="list-style-type: none"> Written questions – Explain programming constructs such as Variables & Conditional statements.
Collision	The process where 2 or more objects come into contact with each other.	
Collision Detection	A computational challenge aimed at detecting collision between 2 or more objects.	Family Learning Opportunities
Variable	A variable can be thought of as a box that the computer can use to store a value. The value held in the box can change. The value held in that box can change.	<p>Using the skills you've learned in class, work with your parent or carer to create a simple game in Scratch. This could be a quiz, a maze, or a platform game. Show them how to use blocks to control sprites, add sounds, and create score systems. It's a great way to share your learning, have fun together, and help someone else understand how programming works!</p> <p>Scratch Programming Website</p> <p>Create a quiz project in Scratch that tests knowledge of basic programming concepts you've learned, such as using variables, creating loops (forever), using conditional statements (if/else), and designing interactive sprites. Once your quiz is complete, share it with your family and ask them to play it to see how well they understand Scratch programming!</p>