Brough Primary School – Curriculum Intention Plan 2023 - 2024

Subject: Computing **Year Group:** Year 5/6		**Area of learning:** Game Design (CS First)
Links to previous work/Remember when	Creating characters and instructions on Scratch.	
Term	**Year 5/6**	**Key Skills to be taught**
Spring 2/Summer 1 2024 (Cycle B) What the children should know at the end of this series of lessons		Game Design is a complete theme designed to be completed over eight (doing five lessons), 45-75 minute sessions. For each lesson, students will watch a series of videos and create one coding project with opportunities to personalise their work using "Add-Ons," which are mini-coding challenges that build on top of the core project.

Vocabulary
Algorithms, code, gaming, story, sprite, block, keyboard, players, racing, mouse, block-stack, maze, platform, obstacle, escape, randomness, repeat

Sequence of learning	Learning Objectives/Outcomes	suggested Lesson Outline
1	**Gaming Story -** **Learning Objective:** Create a gaming story. **Key Knowledge:** What is Computer Science?	**Recap** – What game character is most like you and why? What do you like about your favourite game or app? Learn about CS First and then create a gaming story. (Follow teaching videos for lesson 1).
2	**Racing Game -** **Learning Objective:** Create a two-player racing game. **Key Knowledge:** Being able to move a sprite.	**Recap** – What is an algorithm? Create a two-player racing game in which users control movement with the keyboard. (Follow teaching videos for lesson 2).

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3	**Maze Game -** **Learning Objective:** Guide a sprite through a maze. **Key Knowledge:** Create 'if statements'.	**Recap** – Pac-Man is a classic arcade game from the 1980s. In this game, a Pac-Man character must avoid a swarm of enemies. The Pac-Man character uses If statements in many different ways. For example, if Pac-Man is touching an enemy, then he loses a life. In Scratch, you can express the same kind of statement with a Block-Stack. Create a game in which the user guides a sprite through a maze. (Follow videos for lesson 3).
4	**Platform game -** **Learning Objective:** Create and learn about platform games. **Key Knowledge:** In this type of game, a sprite must move across raised platforms or obstacles.	**Recap** – Some popular platform game samples include Super Mario Brothers, Donkey Kong, and more recently, Doodle Jump. Create and learn about platform games. Students program a player sprite to move and jump across platforms. (Follow videos for lesson 4)

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5	**Escape Game -** **Learning Objective:** Create an escape game. **Key Knowledge:** This game will introduce randomness, as well as a Scratch variable, the timer.	**Recap** – Randomness is an important concept, used in many different games, for example, whenever you play a game that involves rolling a die, such as Monopoly, each roll gives you a random number between one and six. Randomness is often used in video games as well. In the Pokemon video games, players encounter Pokemon randomly in the wild. You never know when you're going to see a wild Pokemon, or even a Pokemon you might encounter. Randomness is also important for sport games.For example, football video games use randomness to ensure that unexpected things happen, no matter how many times the player plays the game. This includes everything from plays that are called, to having the computer players fumble and intercept the ball at a random points in the game. Create an escape game in which a player must avoid other sprites that move randomly.

Learning Outcome/product
In Game Design, students learn basic video game coding concepts by making different types of games, including racing, platform, launching, and more!

Assessment records	**List only those children who have not achieved the expected outcomes.**