KS3 Learning Intentions

Year 7 – Half term 5 MicroBit Madness What? When? Why?	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Weeks 1 - 6	To understand what the Micro:Bit is.

To understand the various components of the device.

To understand the various programming environments. | To understand how to write a simple program.

To understand what compiling is.

To understand how to flash the compiled program to the device. | To develop our understanding of programming using the 'blocks' language.

To practice the art of decomposition and abstraction to help solve a problem.

To understand how to make use of the accelerometer. | Understand how to program the 'Compass' on the Micro:Bit

Further develop skills in problem solving (decomposition and abstraction)

To further develop our skills in programming using the 'blocks' language. | To develop our skills in programming using the blocks language.

To understand the purpose of variables.

To develop understanding of coordinates and see how they are used in developing graphical programs. | To develop our skills in programming using the python programming language.

To understand some simple python syntax.

To realise the similarities with the way we program in python compared to blocks. |

KS3 Learning Intentions

Year 8 – Half term 5 Scratch Shooter Game Maker What? When? Why?	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Weeks 1 - 6	Remember how to program different types of movement in Scratch. Learn how to program gravity. Learn how to program jumping.	To understand how to use variables to record the direction of the character. To understand how to program the firing of a bullet from your main character.	Understand how to create baddies which move automatically. Understand how to program the main character so that it interacts with the baddie. Understand how to use a variable to record the score in a game. Understand how to shoot baddies and achieve a score.	To understand how to use IF-Statements and Broadcast scripts to program levels in a computer game.	To understand how to plan / design your own computer game. To understand what makes a successful game within this project.	To understand how to build / code your own computer game using "Scratch". To understand what makes a successful game within this project. Be able to peer and self-assess your work and make improvements to ensure you meet your target grade.

KS3 Learning Intentions

Year 9 – Half term 5 Scratch Scrolling Game Maker What? When? Why?	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Weeks 1 - 6	Remember the coordinates system in Scratch. Learn how to program a scrolling background. Understand how Scrolling Backgrounds work.	Remember and understand how to program 'Gravity' in Scratch. Understand how to program the 'Shooter'.	Remember and understand how to program a 'Scoring System' in Scratch. Understand how to program a 'Baddie Object'.	Understand the theory of levels in the scrolling game. Understand how to program new levels in our current scrolling game.	To understand how to plan / design your own computer game To understand what makes a successful game within this project	To understand how to build / code your own computer game using "Scratch". To understand what makes a successful game within this project. Be able to peer and self-assess your work and make improvements to ensure you meet your target grade.