Topic 3 – Programming and Control Learning Journey

Our computing key threads:

Computer Science

Information Technology

Digital Literacy

KS3
GCSE
A-Level

Code vulnerabilities -hacking, malware

How devices communicate e.g. radio, Bluetooth

MicroBits

Identify how AI is used

Block coding transformed to text-based

Use IF, ELSE IF and ELSE

Create and program variables

Program various inputs and outputs

Use a physical computing device safely

Y6

Online gaming – blackmail

Plan, create and evaluate a program

Y5

Inputs, processes and outputs

Sequences

IF statements

Debug complex routines

Create variables

Broadcast functions

Plan, create and evaluate a program

Online gaming – communication

Plan, create and evaluate a program

Multiple sprites

Backgrounds / scenes

Complex sequences

Repetition

Alter existing variables

Program precise turns

Y4

Rationing time spent online

Age ratings of games

What is programming?

Algorithms

Simple sequences

Program motion commands

Sprites

Debug simple errors

Screenshots

Control technologies

Y3

KS1