

**Code -**Lines or blocks of instructions (see program).

**Program -**A sequence of instructions written to perform a

specified task on the computer.

**Variables-** Elements that are likely to change.

**Input** - A method of computers receiving data (Eg. keyboard, mouse, touch, sensors etc,).

**Output**

The information produced by a computer system for its user, typically on a screen, through

speakers or on a printer, but possibly though the control of motors in physical systems. Also an action performed by the computer e.g. switching on a light, moving a turtle or sprite across the screen.

**parameter** - a limit or boundary which defines the scope of a particular process or activity.

**I can use variables and conditional events in code.**

Children will write a code that uses random numbers to move a caterpillar in different directions.

**I can write code that prompts the user to input the value of a variable, and use this to create an interactive block chart.** Childrenwill write code that prompts the user for an input, and uses this to change the properties of an object.

**I can use knowledge of variables to make a balloon pop game that gets harder as users score more points.**

Children will write code to check the score in their game and combine this with conditional ‘if statements’ inside looping events to make the game harder.

**I can combine knowledge of co-ordinates, conditional events, random numbers and variables to create a game where players stop objects moving by changing their properties.**

Children will write code that uses conditional events and co-ordinates to control when an object moves and stop an object.

**I can write code that detects the properties of an object and passes the value of these properties (or a set of parameters) to other objects, and to use this to create a space game.**

Children will combine what I have learned about object properties and passing a set of parameters to create a space game.

I know how to design and write programs using sequence, repetition and variables.

I can set values in code to control the speed of an object.

I can set values and using co-ordinates in their code to control the movements and location of an object.

I can use random numbers in combination with variables and conditional hit events to create a realistic pinball game.

Vocabulary

Topic: Coding

Year: 6

**Waterloo Primary School – Computing Knowledge Organiser**

What should I already know?

What will I know by the end of this unit of work?