Goonhavern Primary School- Computing		
TOPIC: Computing	**YEAR: 6**	**STRAND: Computer Science**

What should I know already?	What will I know by the end of the unit?
● How to set values in code to program the speed of an object. ● How to use variables to control the direction and speed of an object within a game. ● Write code that uses a value to make an object move at the start and change heading and angle when keys are pressed ● Use an iPad to practise setting values and using coordinates in their code to control the movements and location of an object ● Write code that uses a value to make the speed of a car increase or decrease when different keys are pressed ● How to design and make an app and assign values in code to control the movement of objects.	To write code that prompts a user to input the value of a variable, and use it to create an interactive block chart.
	Use knowledge of variables and conditional 'if statements' to create a game.
	The concept of Booleans, how they can be helpful and implemented into coding.
	Write code that uses random numbers and variables to control when an object moves.
	Detect object properties and set values for these in my code.
	Write code that detects certain events and passes these values to another object, determining how it will move.

School Values

Resilience   Creative Thinking   Self-Improvement   Responsibility

Five Ways to Wellbeing
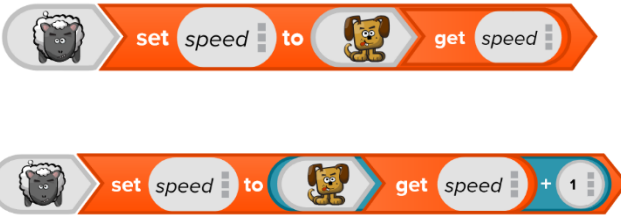
Connect   Take Notice   Keep Learning

Vocabulary	
Variables	Something that can be changed. In computing, variables are used to store information that might change and can be used later in a program.
Boolean expressions	A type of data with two values: true and false.
Operator	A character, or characters, that determine what action is to be performed or considered
User Input	Data that a computer receives from a user.
Parameters	The names of the information that we want to use in a function or procedure.
Detect	When a computer checks the parameter of an object's property.
Object	Something on the screen, such as a picture, a button or a piece of text.

Property	Special values that are included within a object.

Image/diagram that helps me to articulate my knowledge/understanding	Possible ideas
set var **width** to ask _width_ and wait var **cart total** x -0.25 round var **cart total** to .00 set var **timer running** to TRUE ? → If var **timer running** = TRUE set var **timer running** to FALSE set _speed_ to get _speed_ set _speed_ to get _speed_ + 1	Use variables to ask the user for an input an create an interactive graph. Combine variables with conditional events to create a game which gets more difficult. Perform calculations with variables to stimulate a toy shop till. Use Boolean expressions to stimulate a working stopwatch. Combine randomness with object properties to make a tricky game where birds move in unpredictable ways. Detect the position of the rocket and pass this on so it appears to fire a laser. Detect the speed and direction of the mouse to stimulate kicking a ball. Herd a sheep into its pen by passing on properties from the sheepdog. For Micro:Bit planning and ideas, see planning documents on Google Drive.