

Year 3 – Coding

Knowledge Organiser



Key Learning
<ul style="list-style-type: none"> To design algorithms using flowcharts. To design an algorithm that represents a physical system and code this representation. To use selection in coding with the 'if' command. To understand and use variables in 2Code. To deepen understanding of the different between timers and repeat commands.

Key Resources

Key Vocabulary and definition	
Computer simulation	A program that models a real-life situation.
Event	Something that causes a block of code to be run.
If	A conditional command. This tests a statement. If the condition is true, then the commands inside the block will be run.

Images			
Open the main menu 	Save your work 	Watch the instruction video 	Get a hint
Open design mode 	Switch to code mode 	An 'if' command 	A "when clicked" code block
A repeat code block 	A timer code block 	Creating a variable in 2Code 	A change variable block

Questions	
What is the difference between the different object types in 2Code Gibbon level?	<ul style="list-style-type: none"> The different objects have different properties. This makes them suitable for different type of programs. Buttons can only be clicked and have their colour and text changed. Vehicles have speed and angle. Characters have movement in 4 directions Turtles have rotation, pen up and down.
What does selection mean in coding and how can you achieve this in 2Code?	<ul style="list-style-type: none"> The code will contain commands that require a decision and the next code to run will depend upon the outcome of this decision. In 2Code we used the 'if' command for selection.
Give an example of how you could use a variable in coding.	<p>Some examples are:</p> <ul style="list-style-type: none"> A timer that counts every second and displays the value. A value that changes depending upon whether a switch is on or off. Storing how many times a user has clicked on an object.