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| **Year 3 Autumn 2 – Coding** | | |
| **Key Images** | **Key Learning** | |
|  | * 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 difference between timers and repeat commands. | |
| **Key Vocabulary** | **Key Questions** |
| * Action * Algorithm * Bug * Code Block * Code Design * Command * Control * Debug/Debugging * Design Mode * Event * If * Input * Output * Object * Properties * Repeat * Computer Simulation * Selection * Timer * Variable | **What is the difference between the different object types in 2Code Gibbon level?**  The different objects have different properties. This makes then 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?**  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.**  Some examples are:   * 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. |



Reference to