Unit 4.1: Coding

- **Action**: A type of command which causes an object to alter its behaviour. Actions could be used to move an object or change a property.
- **Alert**: This is a type of output. It shows a pop up of text on the screen.
- **Algorithm**: a precise, step-by-step set of instructions used to solve a problem or achieve an objective.
- **Background**: In 2Code the background is an image in the design that does not change.
- **Button**: A type of object that responds to being clicked on.
- **Code blocks**: A way to write code using blocks which each have an object or an action. Each group of blocks will run when a specific condition is met or when an event occurs.
- **Command**: A single instruction in 2Code.
- **Co-ordinates:** Numbers which determine the position of a point, shape or object in a particular space.
- **Debug\ Debugging:** Fixing code that has errors so that the code will run the way it was designed to.
- **Design:** In coding, this is a plan for the program showing the visual look of the user interface (the screen) with the objects. The algorithm can be represented as part of the design, showing actions and events.
- **Event**: An occurrence that causes a block of code to be run. The event could be the result of user action such as the user pressing a key (**when Key**) or clicking or swiping the screen (**when Clicked, when Swiped**). In 2Code, the event commands are used to create blocks of code that are run when events happen.
- **Execute**: This is the proper word for when you run the code. We say, 'the program (or code) ***executes***.'
- **Flowchart**: A diagram that uses specifically shaped, labelled boxes and arrows to represent an algorithm as a diagram.
- **'If' statement:** A computer uses an IF statement to decide which bit of code to run. IF a condition is true, then the commands inside the block will be run.
- **'If/Else' statement:** A conditional command. This tests a statement. If the condition is true, then the commands inside the 'if block' will be run. If the condition is not met, then the commands inside the 'else block' are run.
- **Input:** Information going into the computer. This could be the user moving or clicking the mouse, or the user entering characters on the keyboard. On

tablets there are other forms such as finger swipes, touch gestures and tilting the device.

- **Nest**: When coding commands are put inside other commands. These commands only run when the outer command runs.
- **Object**: Items in a program that can be given instructions to move or change in some way (action). In 2Code Gibbon, these include character, turtle, button, vehicle, animal, food, shape, number, input and label.
- **Prompt**: A question or request asked in coding to obtain information from the user in order to select which code to run.
- **Implement**: When a design is turned into a program using coding.
- **Predict**: Use your understanding of a situation to say what will happen in the future or will be a consequence of something.
- **Repeat:** This **command** can be used to make a **block of commands run** a set number of times or forever.
- **Repeat until:** In 2Code this command will repeat a block of commands until a condition is met.
- **Run:** Clicking the Play button to make the computer respond to the code.
- **Properties**: These determine the look and size of an object. Each object has properties such as the image, scale and position of the object.
- **Selection**: Selection is a decision command. When selection is used, a program will choose which bit of code to run depending on a condition.
- **Sequence**: This is when a computer program runs commands in order.
- **Timer:** In coding, use a timer command to run a block of commands after a timed delay or at regular intervals.
- **Variable**: A named area in computer memory. A variable has a **name** and a **value**. The program can change this variable value. Variables are used in programming to keep track of things that can change while a program is running.