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| Subject | Computing | Theme | Coding | Term | 2 |
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What should I already know?

- How to design algorithms using flowcharts.
- How to design an algorithm that represents a physical system and code this representation.
- How to use selection in coding with the 'if' command.
- How to understand and use variables in 2Code.
- To have a deeper understanding of the different between timers and repeat commands.

What should I know by the end of the unit?

- How selection in computer programming.
- How an IF statement works.
- How to use co-ordinates in computer programming.
- To understand the "repeat until" command.
- How an IF/ELSE statement works.
- What a variable is in programming.
- How to use a number variable.
- How to create a playable game.

Key images

Key Vocabulary

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| Action | Types of commands which are run on an object. They 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. |
| Bug | A problem in a computer program that stops it working the way it was designed. |
| Code Design | Design what your program will look like and what it will do. |
| Co-ordinates | Numbers which determine the position of a point, shape or object in a particular space. |
| Debug/Debugging | Looking for problems in the code, fixing and testing them. |
| Design Mode | Used to create the look of a 2code computer program when it is run. |
| Event | Something that causes a block of code to be run. |
| Flowchart | A diagram which represents an algorithm. |
| Get Input | This puts the text that a user types into the computer's temporary memory to be used to control the program flow. |
| If | A conditional command. This tests a statement. If the condition is true, then the commands inside the block will be run. |
| If/Else | 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, the commands inside the 'else block' are run. |
| Input | Information going into the computer. Can include moving or clicking the mouse, using the keyboard or swiping and tilting the device. |
| Nesting | When you write a command inside something else e.g. a block of commands could be nested inside a timer. |
| Output | Information that comes out of the computer e.g. sound. |
| Object | An element in a computer program that can be changed using actions or properties. In 2Code, buttons characters and vehicles are types of objects. |
| Prompt | A question or request asked in coding to obtain information from the user in order to select which code to run. |
| Repeat | This command can be used to make a block of commands run a set number of times or forever. |
| Repeat Until | This command can be used to make a block of commands run until something certain happens. |
| Selection | This is a conditional/decision command. When selection is used, a program will choose a different outcome depending on a condition. |
| Sequence | When a computer program runs commands in order. |
| Timer | Use this command to run a block of commands after a times 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. |