

## Key Vocabulary

|                     |                                                     |
|---------------------|-----------------------------------------------------|
| <b>variables</b>    | Something that is changeable.                       |
| <b>program flow</b> | The order in which your lines of code are executed. |
| <b>design</b>       | To create a project to include variables.           |
| <b>bug</b>          | A mistake or error in software code.                |
| <b>debug</b>        | To remove errors in programming.                    |

## Key Facts

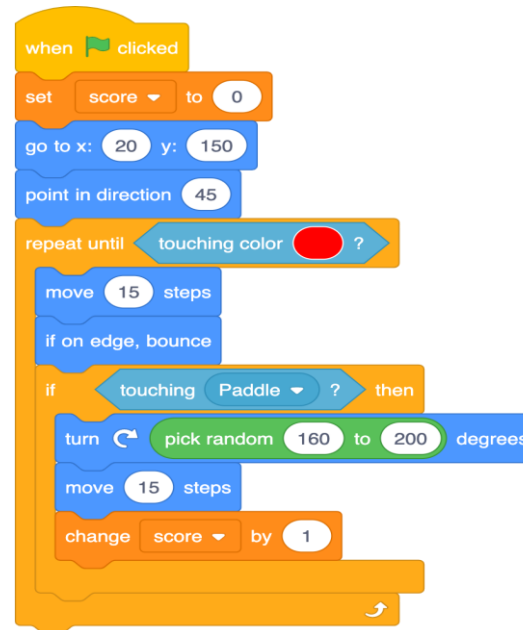
- Computer programs use variables to store information.
- Variables could be used to store the score in a game, the number of cars in a car park or the cost of items on a till. They work in a similar way to algebra, where a letter in your code can stand for a number.
- A supermarket till could use variables to store information about all the items you buy. As more items are scanned the variable's total would increase. This value will then be used to calculate how much you need to pay for your shopping.

## Key Questions

- What is the difference between a variable and program flow?
- How do we ensure a game is running smoothly?
- What are some variables which appear in games?
- What are the steps taken to design games?

## Links to other Learning

- Year 1 - Programming A  
*Moving a robot*
- Year 2 - Programming B  
*Robot algorithms*
- Year 3 - Programming B  
*Events and actions*
- Year 4 - Programming B  
*Repetition in games*
- Year 5 - Programming B - *Selection in quizzes*



## Famous Computer Scientists

### Shigeru Miyamoto



Shigeru Miyamoto is a Japanese video game designer, producer and game director at Nintendo. He is the creator of some of the most acclaimed games, including Mario and The Legend of Zelda. He is widely regarded as one of the most accomplished and influential designers in the history of video games.