



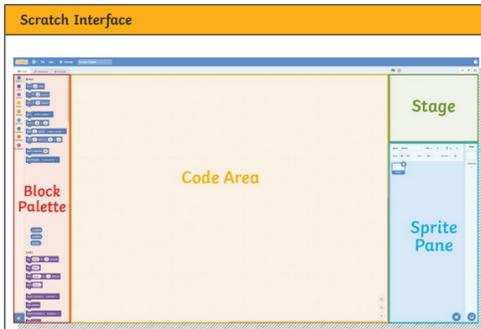
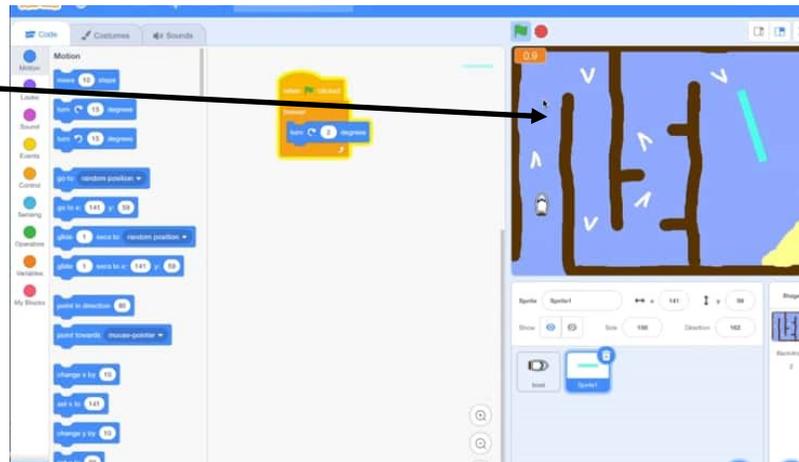
# Year 3 Scratch



## You have already learnt...

In Year 2, you started using the Scratch interface and looking at which categories of blocks you would need for different actions. You used the pen to make your sprite move around and follow instructions to draw lines and shapes. You used different sprites and backdrops.

This is the maze that you will create for your boat to navigate



## Key Skills

- Design and write simple programs for purpose
- Use sequencing effectively when creating algorithms
- Add selection and simple variables in programs
- Come up with simple debugging solutions when considering programming
- Explain simple errors in programs

## Key Knowledge

- Algorithms are a set of instructions that will be followed clearly and precisely.
- selecting specific blocks will allow your sprite to react in specific ways
- when you add variables to your algorithm, it adds parts to your project that can be manipulated while it is playing.
- when you make a mistake in your game, if you figure out what is wrong and fix it, it is called debugging.

## Debugging

Debugging is the process of testing code and removing any errors or bugs from the program. The term 'computer bug' was first used in 1947 by computer scientist Grace Hopper, who discovered that a dead moth in the computer was causing an error.



## Key Vocabulary

<b>algorithm</b>	A sequence of ordered instructions. In Scratch, <b>algorithms</b> are referred to as scripts.
<b>block</b>	A puzzle-shaped piece of code. They can connect to other <b>blocks</b> to create <b>algorithms</b> .
<b>code</b>	A set of instructions written in a programming language that a computer can understand.
<b>condition</b>	A <b>block</b> of code that will only run if a certain event is true or false.
<b>loop</b>	A way to repeat a set of instructions over and over again.
<b>sprite</b>	An image that can be created and programmed in Scratch.
<b>variable</b>	A value that can be recorded in the memory of Scratch. A <b>variable</b> can be edited.

## Next you will learn...

You will use Scratch in every year in KS2, learning to make animations, create games and write your own stories.