

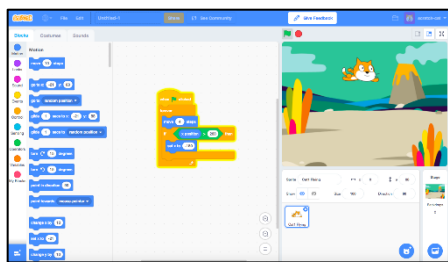


### What should I already Know?

- I understand directional language – North, South, East, West, Forward, backwards, 90 degrees, 180 degrees etc.
- I can plan a set of commands for a Beebot and predict the intended outcome.
- I can programme a Beebot using more than 4 commands and test my prediction

### The Basics of Scratch

- Programming is when we make a set of instructions for computers to follow.
- Scratch is a program that we can use in order to code our own stories and animations.
- We use algorithms (a set of instructions to perform a task) to sequence movements, actions and sounds.



- The sprite is the character.



#### Adding/Removing Sprites:

There are many sprites to choose from.

**Attributes:** We can change our animation: Code, Costumes, Sounds.

**Backdrops:** Backdrops can be added



### Important Vocabulary

Resize   Extension block   Debug   Test   Sprites   Sequence   Programme   Algorithm

### Event and Action Blocks

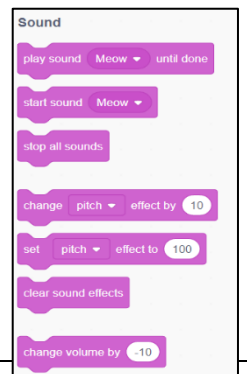
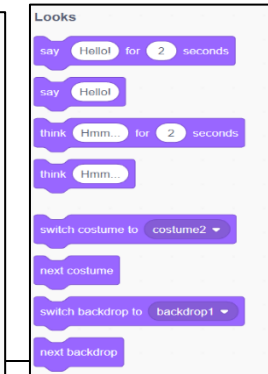
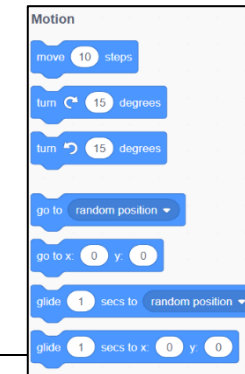
#### Event Blocks:

Event blocks are coloured yellow and are used to sense different events that happen.



#### -Action Blocks:

They make the sprite move, make sounds and change appearance.



### Sequencing and Algorithms

-A sequence is a pattern or process in which one thing follows another. In Scratch, blocks can stack vertically on top of one another to create sequences.

-Designing an algorithm (set of instructions for performing a task) will help you to program the sequence that you require.



-Programming is when we move the blocks into the position (based on our algorithm design). Programming uses a code that the computer can understand.

### Trialling and Debugging

-Programmers trial algorithms first to find any errors:

-Sequence errors: An instruction in the sequence is wrong or in the wrong place.

-Keying errors: Typing in the wrong code.

-Logical errors: Mistakes in plan/thinking.



Remember to **debug** it.

### Concepts

COMPUTER  
SCIENCE

CREATORS