Topic:
Selection in Physical Computing - Crumble Kits
Cycle A Summer 1 Y5/6

New Vocabulary

Count-controlled loop	a form of repetition in which a set of commands are carried out a specific number of times.
Condition-controlled loop	a form of repetition in which a set of commands stop being carried out when a condition is met. E.g., from when the 'score' in a game reaches a certain value to when a key on a keyboard has been pressed.
Infinite loop	a loop that commands the instruction/set of instructions to repeat forever.
Condition	Conditions are statements that need to be met for a set of actions to be carried out.

Career links
Engineering:
The skills developed with Crumble kits, including programming, problem-solving, and design, are highly relevant for various engineering fields.

Prior Learning

In Year 1/2, pupils learned:
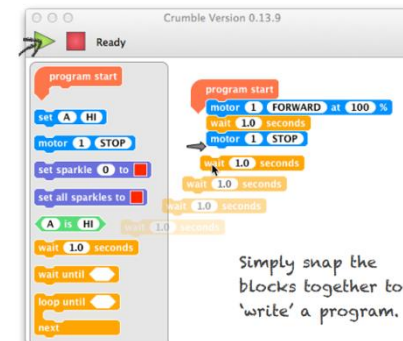How to create their own programs, running them using the green flag on Scratch Junior.

In Year 3/4 pupils learned:
How to create programs on Scratch.
An infinite loop keeps repeating forever, without stopping.
A sequence is a pattern or process in which one thing follows another.

Simply snap the blocks together to 'write' a program.
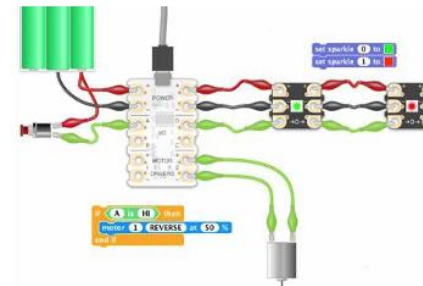
New Knowledge

Crumble is an easy-to-use programmable controller. It can drive 2 motors forwards and backwards at variable speeds.

We use algorithms (a set of instructions to perform a task) which we can plan, model and test, to create accurate actions using the Crumble.

We can use different types of loops. We can identify conditions in statements, stating if they are true or false.

Programming the Crumble:

Creating with the Crumble: