

Things you already know:

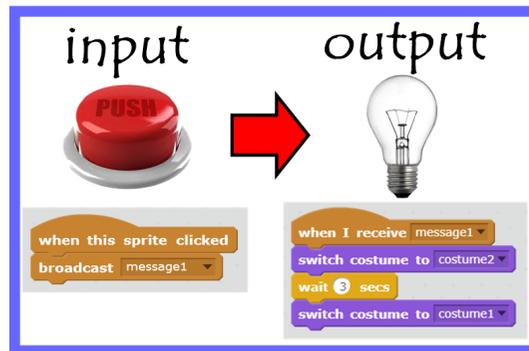
- Know what an algorithm is.
- How to code using Scratch.

Knowledge you will gain:

- You will learn how computer technology is used within everyday devices such as fridges, microwaves, cars and others.
- To know what inputs and outputs are and how these are used on everyday devices and also specifically how electronic toys use these.
- You will learn how to create a toy simulation in Scratch, using different costumes to show the toy in an 'on' or 'off' position for each button created.
- You will learn to use the 'broadcast' option to send a message from the button to the toy to change costume from the on/off state.

So each button will be coded in a similar way. So when the button is clicked it will broadcast a message.:

When the toy receives the message it will switch to the costume with for example the light turned on, before switching back to the 'off' position.



Specific skills/understanding

To understand how the broadcast coding blocks work. Understand that if you want a combination of items being turned on at the same time e.g. a light on and sound playing : costumes for all combinations will need to be created.



Vocabulary

input: A device that enables data to be entered to a computer system. So for example a switch/button/sensor makes something happen.

Output: What happens when the input is switched; this might be a light coming on, a speaker playing a sound, a motor being turned on or text appearing on the screen. Outputs can be physical on real world devices or they can be program based making things appear on the screen.

Simulation: using a computer to imitate something from real world.

Ongoing skill set

Debugging code using logical processes. Creating concurrent coding triggered by different inputs.