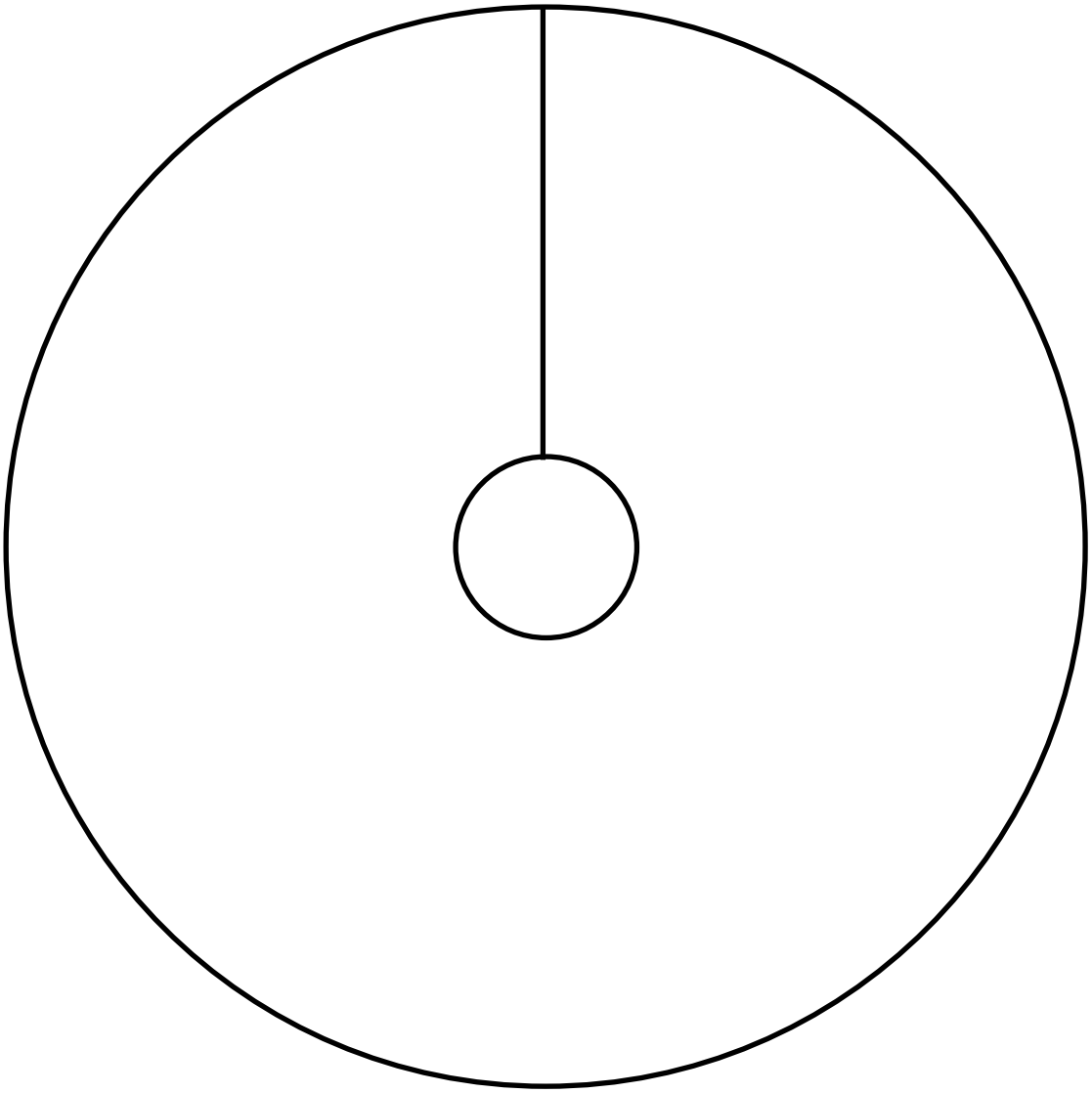


Large Traffic Light Reflection Cone

(designed to fit in a 4 inch x 4 inch box)

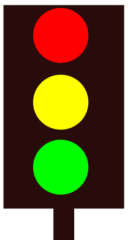
Traffic Light Algorithm

Wait 10 seconds
Turn red on
Turn amber on
Turn red off
Turn amber on
Turn green off
Turn green on
Turn amber off
(Repeat all forever)
Wait 3 seconds
Wait 10 seconds
Turn amber off
Wait 3 seconds

Creating an algorithm

- Cut out the algorithm instructions on the left
- Watch the traffic lights
- Order the instructions into the right order.
- Check the order with your teacher.
- Stick them onto sheet TL3.

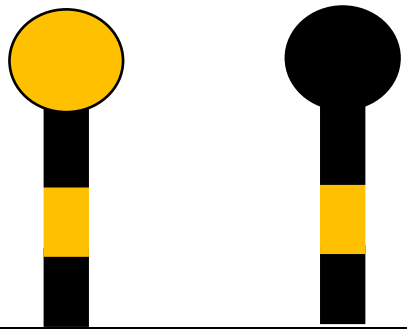
Traffic Light Algorithm



Traffic lights algorithm example commands to use TL3

Turn red on
Turn red off
Turn amber on
Turn amber off
Wait 15 seconds
Turn Green on
Turn Green off
Wait 2 seconds

Name_____
Class_____



Turn amber on
Wait 1 second
Turn amber off
Wait 1 second
Turn amber on
Wait 1 second
Turn amber off
(The first four commands could be repeated)

Have a look at this Belisha Beacon light algorithm

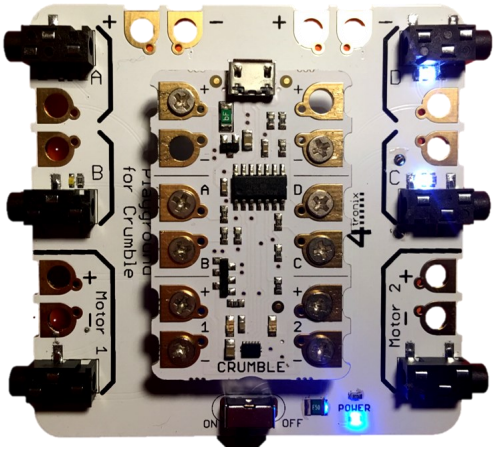
Name _____ Class _____

Thinking about wiring a Traffic Light TL4

Traffic Light

Traffic lights are **outputs** because they **put out** information from the program. These can output three colours.

Draw the wires to show what connections you will use



Fill in the chart to show which letters your lights are plugged into

Letter	Colour of the light	Input or Output

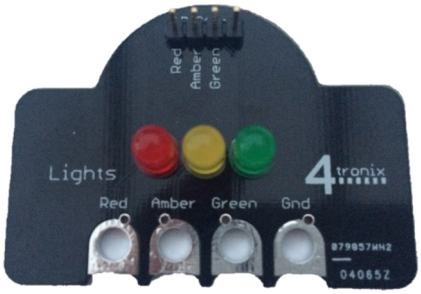
Name _____ Class _____

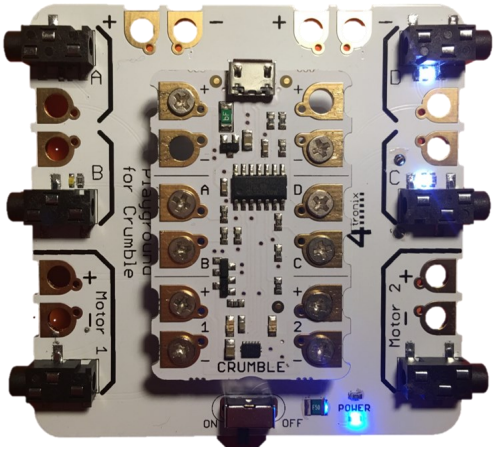
Thinking about wiring a Traffic Light TL5

Traffic Light

Traffic lights are **outputs** because they **put out** information from the program. These can output three colours.

Draw the wires to show what connections you will use





Fill in the chart to show which letters your lights are plugged into

Letter	Colour of the light	Input or Output

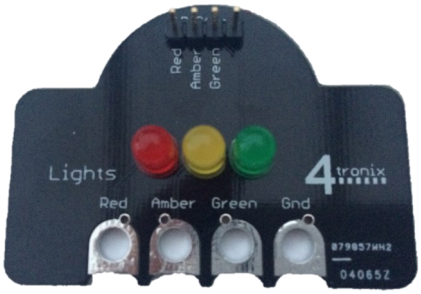
Name _____ Class _____

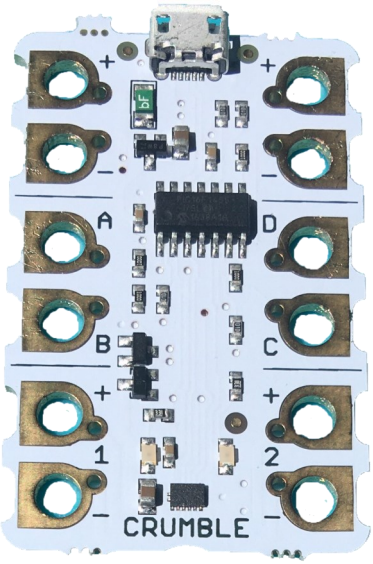
Thinking about wiring a Traffic Light TL6

Traffic Light

Traffic lights are **outputs** because they **put out** information from the program. These can output three colours.

Draw the wires to show what connections you will use





Fill in the chart to show which letters your lights are plugged into

Letter	Colour of the light	Input or Output

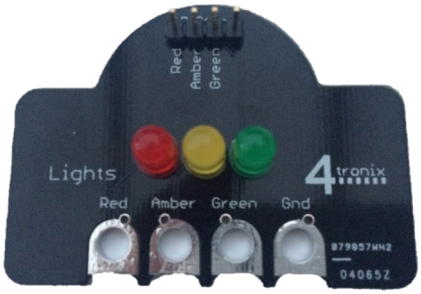
Name _____ Class _____

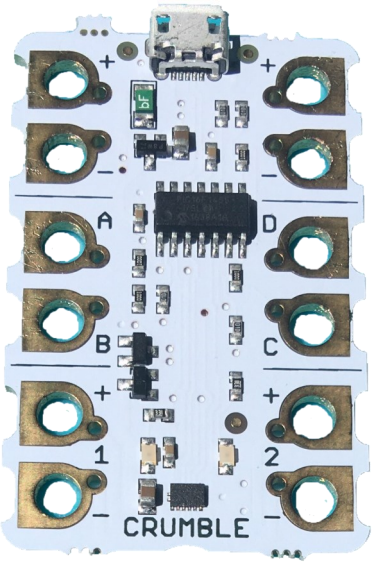
Thinking about wiring a Traffic Light TL6

Traffic Light

Traffic lights are **outputs** because they **put out** information from the program. These can output three colours.

Draw the wires to show what connections you will use



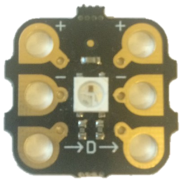


Fill in the chart to show which letters your lights are plugged into

Letter	Colour of the light	Input or Output

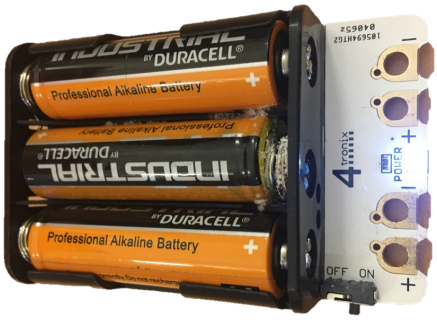
Name _____ Class _____

Thinking about wiring a Traffic Light TL7

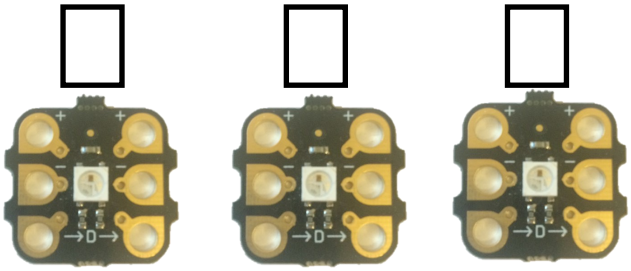


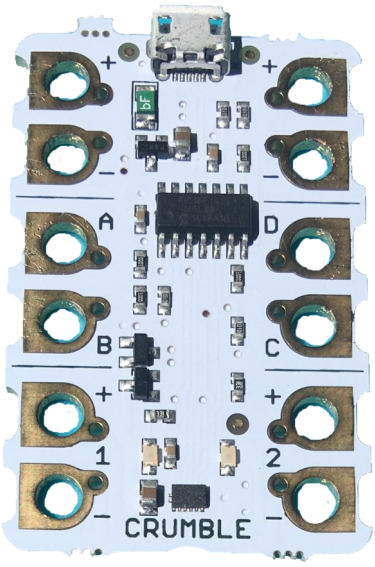
Sparkle lights are **outputs** because they **put out** information from the program. These can output many colours.

Draw the wires to show what connections you will use



Don't forget to name each sparkle 0, 1 & 2



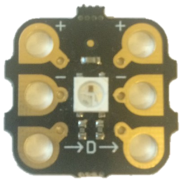


Fill in the chart to show which letters your sparkles are plugged into

Letter	Type of device	Input or Output

Name _____ Class _____

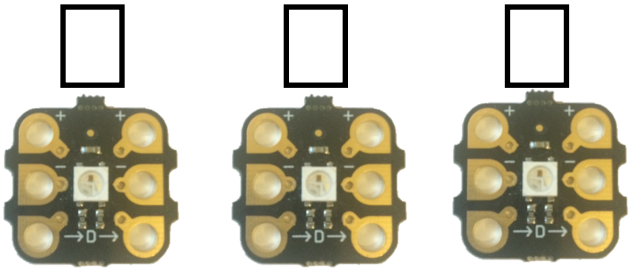
Thinking about wiring a Traffic Light TL7

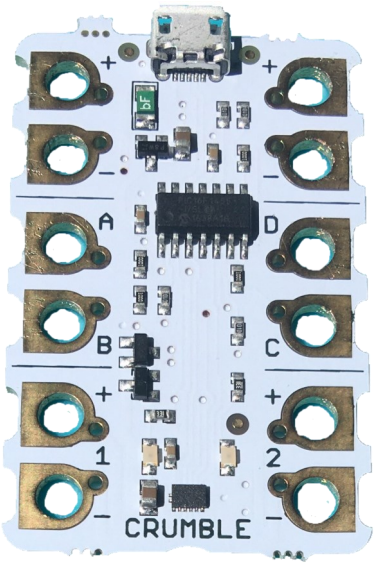


Sparkle lights are **outputs** because they **put out** information from the program. These can output many colours.

Draw the wires to show what connections you will use

Don't forget to name each sparkle 0, 1 & 2



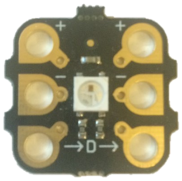


Fill in the chart to show which letters your sparkles are plugged into

Letter	Type of device	Input or Output

Name _____ Class _____

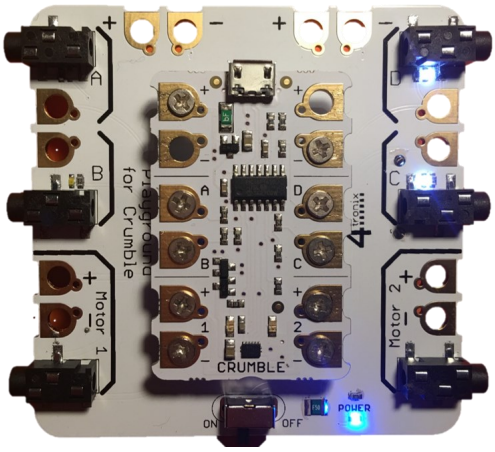
Thinking about wiring a Traffic Light TL8

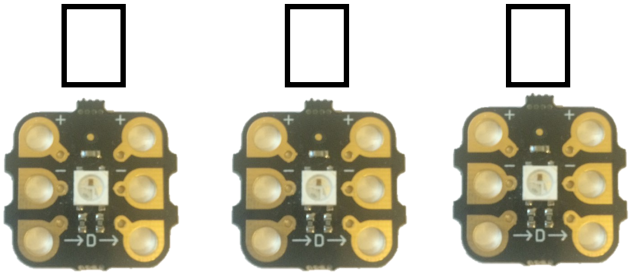


Sparkle lights are **outputs** because they **put out** information from the program. These can output many colours.

Draw the wires to show what connections you will use

Don't forget to name each sparkle 0, 1 & 2



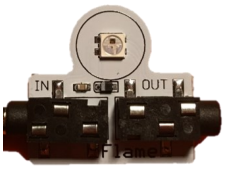


Fill in the chart to show which letters your sparkles are plugged into

Letter	Type of device	Input or Output

Name _____ Class _____

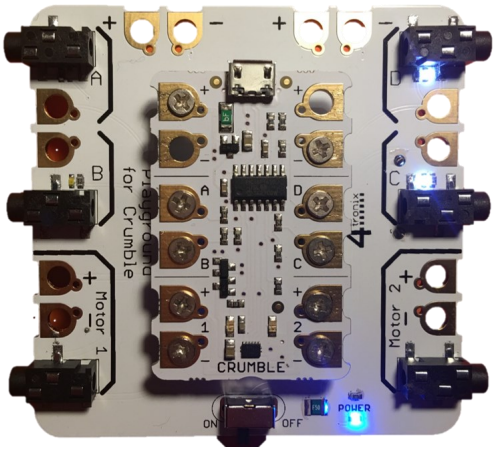
Thinking about wiring a Traffic Light TL9

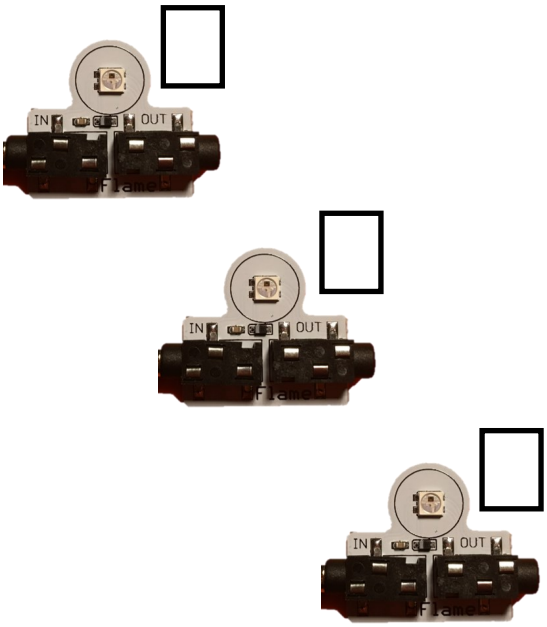


Flame lights are **outputs** because they **put out** information from the program. These can output many colours.

Draw the wires to show what connections you will use

Don't forget to name each sparkle 0, 1 & 2





Fill in the chart to show which letters your flames are plugged into

Letter	Type of device	Input or Output

Traffic Lights Assessment Sheet TL10 Name _____ Class ____

I did this well

I did this ok or I did this a little

I tried this but it didn't work or I didn't do this at all

I created a traffic lights algorithm.	
I persevered when my traffic lights algorithm was incorrectly ordered.	
I used the maker cards to draw a neat wiring diagram.	
I used the maker cards and my wiring diagram to wire up my traffic lights.	
I persevered when my wiring didn’t work.	
I create a working traffic lights program.	
I adapted my program so it repeated endlessly.	
I debugged my code to make it mirror my traffic lights algorithm.	
I added a ...	

Sticker	I got this sticker for
Sticker	I got this sticker for
Sticker	I got this sticker for