# **Truth tables** are used to work out the **output** from a set of **Boolean logic** statements

Α	В	A AND B

A and B are the inputs The last column is the output

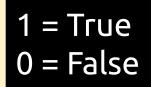
- A is a light sensor
- B is a movement sensor

Α	В	A AND B

1 = True 0 = False

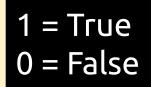
- A is a light sensor
- B is a movement sensor

Α	В	A AND B
0	0	
0	1	
1	0	
1	1	



- A is a light sensor
- B is a movement sensor

Α	В	A AND B
0	0	It's light; there's no movement
0	1	It's light; there is movement
1	0	It's dark; there's no movement
1	1	It's dark; there is movement



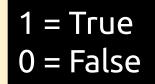
- A is a light sensor
- B is a movement sensor

Α	В	A AND B
0	0	It's light; there's no movement = no light
0	1	It's light; there is movement = no light
1	0	It's dark; there's no movement = no light
1	1	It's dark; there is movement = light on

1 = True 0 = False

- A is a light sensor
- B is a movement sensor

Α	В	A AND B
0	0	0
0	1	0
1	0	0
1	1	1



Each of the four logic gates has its own Truth Table that you need to know

- AND
- OR
- XOR
- NOT

Truth tables can be much more complex than this and have up to 3 inputs