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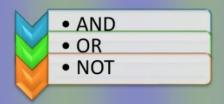
#### Gates Logic Basic about Worksheet الملف

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## **Physical Computing**

### **Basic logic gates**





# AND Gate



The following table shows whether the tank receives water or not from the main supply based on whether the A and B valves are closed or open.

A valve	B valve	Water supply to tank	
Closed	Closed	does not receive water	
Closed	Open	does not receive water	
Open	Closed	does not receive water	
Open	Open	receives water	

A valve	B valve	Water supply to tank
0	0	
0	1	
1	0	
1	1	



The standard symbol for AND Gate

# OR Gate



A valve	B valve	Water supply to tank	
Closed	Closed	does not receive water	
Closed	Open	receives water	HILL
Open	Closed	receives water	
Open	Open	receives water	

A valve	B valve	Water supply to tank
0	0	
0	1	
1	0	
1	1	



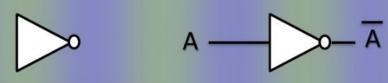
The standard symbol of the OR Gate

## NOT Gate



Sun light	Electric lamp
available	OFF
unavailable	ON

Sun light	Electric lamp
1	
0	



Standard Symbol of NOT gate

#### Connecting logic gates in circuits

Obtaining the relevant output according to the input given In OR gate, the inputs are added to give the output (1 + 0 = 1)

#### Write down the output corresponding to the inputs given in the following circuits

