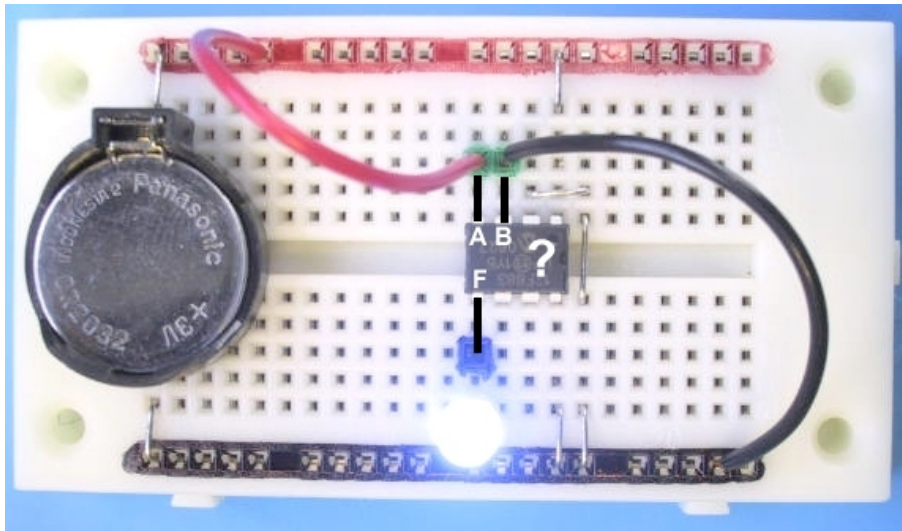
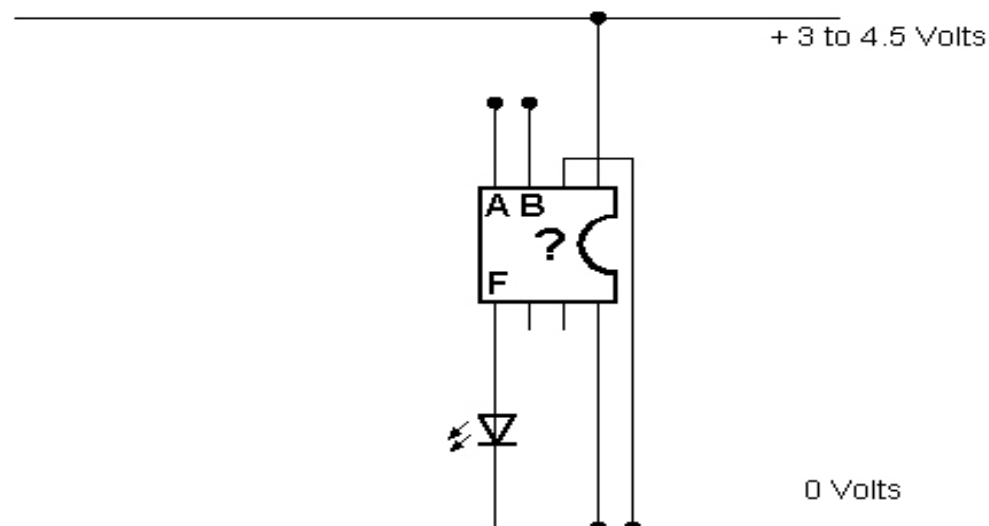


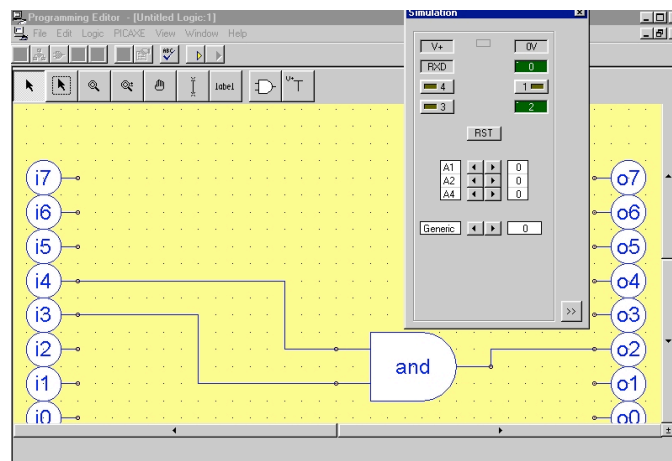
Logic Gates



- Take one logic gate at a time and two jumper wires
- Insert an LED the correct way around on output F
- Insert HIGH and LOW Signals into the two inputs to identify all the Gate types
- Complete the tables on the reverse other side of this sheet



- Prove your results by simulating the logic gates on Screen using the PICAXE Programming Editor: File > New > New Logic Use Pins 3 and 4 as IP and 2 as OP
- To make your own gates Refer to Help Section PICAXE Manual I Tutorials 5 Help Section PICAXE Manual II Let commands.



Task 2

For the following gates, show the symbol and complete the truth table

(i) **NOT**

symbol:

Truth Table

A	F
0	
1	

(ii) **NOR**

symbol:

Truth Table

A	B	F
0	0	
0	1	
1	0	
1	1	

(iii) **OR**

symbol:

Truth Table

A	B	F
0	0	
0	1	
1	0	
1	1	

(iv) **NAND**

symbol:

Truth Table

A	B	F
0	0	
0	1	
1	0	
1	1	

(v) **AND**

symbol:

Truth Table

A	B	F
0	0	
0	1	
1	0	
1	1	

(vi) **XOR (Exclusive OR)**

symbol:

Truth Table

A	B	F
0	0	
0	1	
1	0	