Name:
Date:

Circuit #13 Relays

1.

How is this circuit, or a circuit like it, used in everyday life? Provide at least three examples.

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_____

Does your relay work? Great.

2.

There are many different types of relays. List at least three and explain the differences between them.

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3.

Give values for Voltage, Current and Resistance for the multimeter position shown. Break the circuit or use Ohm's law to solve for current and resistance. You should get two different sets of values depending on the action of the relay.v

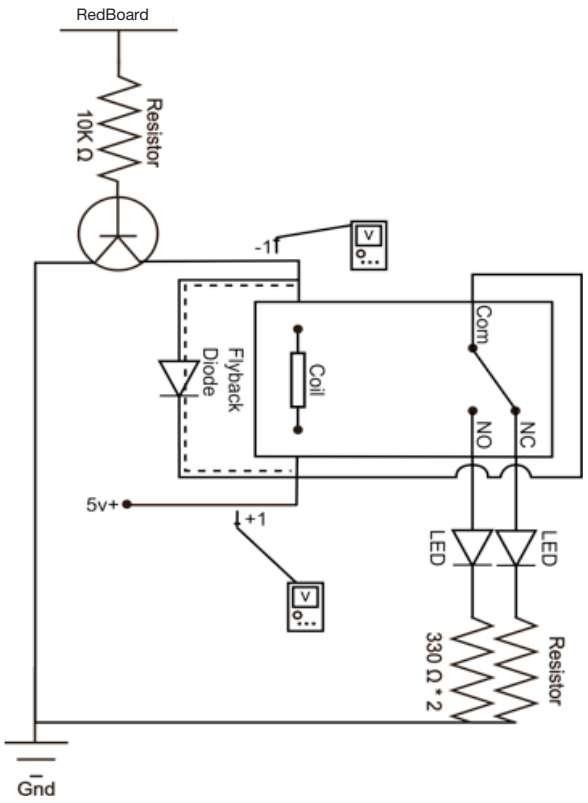
4.

Value # 1:
V =_____ v I =_____ mA R =_____ Ω

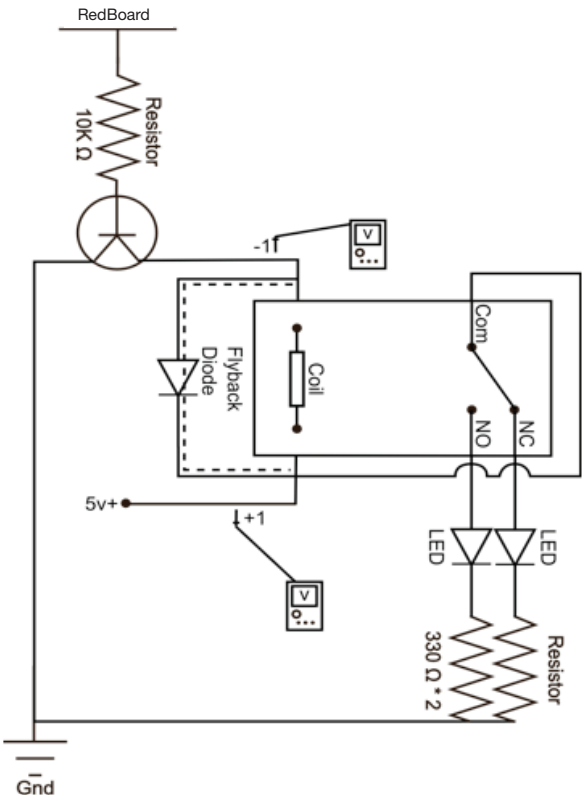
5.

Value # 2:
V =_____v I =_____ mA R =_____ Ω

Meter 1:



Meter 1:



6.

Draw arrows on the dotted line to show possible direction of current flow when RedBoard is turned off.

7.

Explain the two sets of values for the Voltage, Resistance and Current and what each set does.

8.

Explain how a diode effects the current flow of a circuit.

9.

Given what you answered above, explain what you think is the reason for the Flyback Diode, also explain what might happen without this Flyback Diode.

10.

What machine houses your favorite relay? Why is it your favorite relay? Because of the machine that houses it? Because it keeps someone safe? Because it's really big and powerful? Explain.