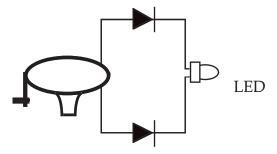
Homework Questions Section 9

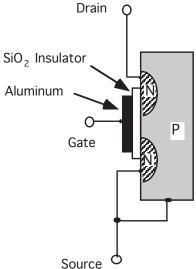
1. Study the diagram below: <u>Predict</u> your observations of the LED if you turn the handle of the Genecon back and forth. Explain.



2. Devise a circuit that uses diodes to find out which way charge is flowing through a circuit during capacitor charging and discharging. Your circuit should use bulb(s) to indicate the charge flow not only between the (+) terminal of the battery and the capacitor, but also between the (-) terminal and the capacitor. Sketch your circuit below.

3. An N-channel field-effect transistor is called an <u>N-channel</u> FET because of the channel formed to allow conduction.

a) What changes would you need to make in order to design a P-channel FET? Sketch the new arrangement.



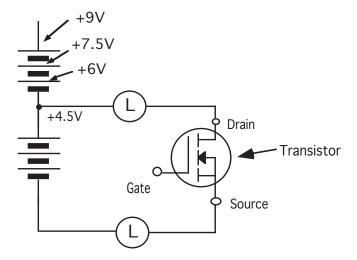
b) How will the function of the P-type FET differ from an N-type?

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4. How would the following circuit need to be changed if a P-channel FET were used? Explain your reasoning.



5. Can an insulating layer block the potential halo of a charge and prevent the charge's halo from influencing charges on the other side of the layer?