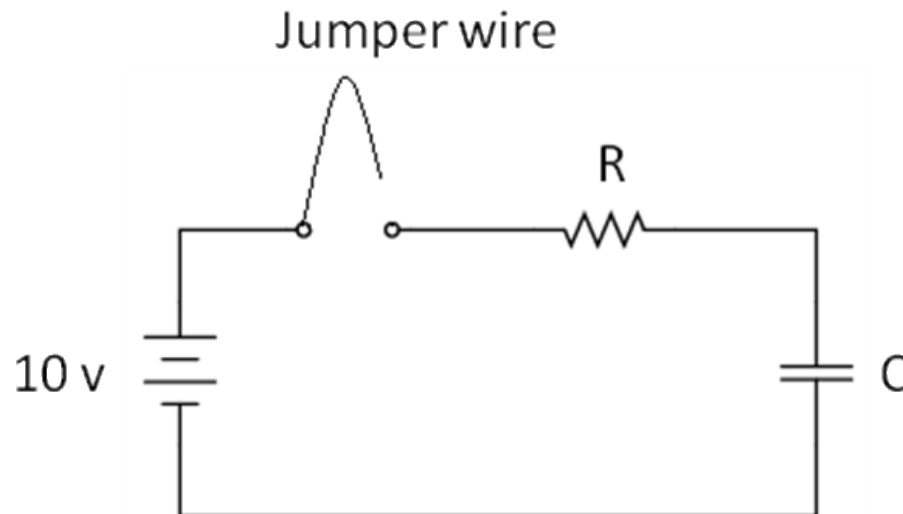




Basic Electricity – Unit 11: Capacitance

Lab 1

1. Using values given by your instructor construct the following circuit.



2. Calculate the RC Time constant for your circuit.
3. Determine the time required for 5 time constants.
4. Leave the jumper wire dis-connected until timing begins.
5. Set the supply voltage for 10 volts.
6. Connect a volt meter across the capacitor.
7. Begin the timing sequence when the jumper wire is connected.
8. Record the voltage across the capacitor in 10 second intervals.
9. Repeat the procedure recording another set of data.
10. Using Excel plot the data in one graph. Be sure to label all information on your graph. This means that if someone who did not do the test were to look at your graph they would understand the results.
11. Repeat the lab for a second set of given values of R and C.



Basic Electricity – Unit 11: Capacitance

Lab 1

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