

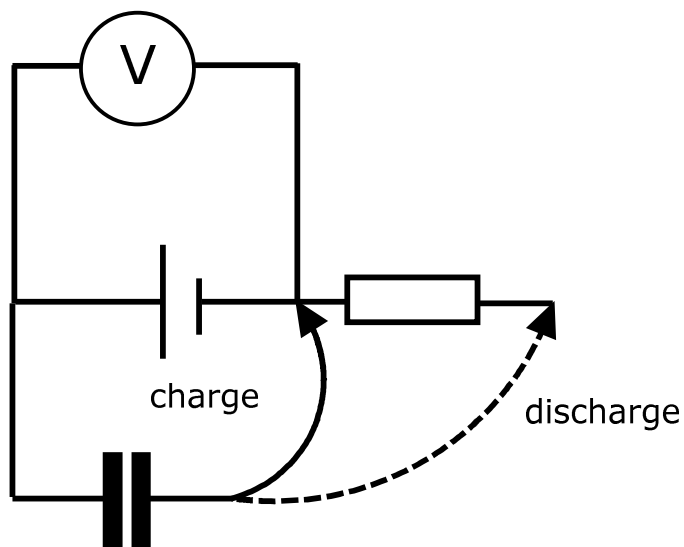
# What are the characteristics of capacitors?

## Apparatus

1 Comboplate  
4 springs  
1 9V battery plus connector  
1 multimeter  
1 1000 $\mu$ F capacitor  
A selection of resistors

## Procedure for experiment 1

Set up your circuit as shown in the diagram below:-



1. Have the multimeter on the setting for voltage.
2. Connect the battery across the resistor and capacitor as shown in the circuit diagram. Leave the circuit completed for a short time - 5 seconds will do. The capacitor is now charged up.
3. Disconnect the battery and connect the capacitor so that it is now discharging via the resistor as shown in the circuit diagram.
4. Note the voltage reading on the multimeter. Note the voltage every 5s and record it in a suitable table.
5. Repeat 2-4 using different resistors.

## Conclusions

1. What is the function of a capacitor? \_\_\_\_\_  
\_\_\_\_\_
2. How do the results show this? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



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