

SNC 1D Current Electricity Review

Knowledge and Understanding: Fill in the blank (10 marks)

1. A term referring to 6×10^{18} electrons is a _____.
2. _____ current is the type of current produced by a battery.
3. A device used to measure the current is an _____.
4. The two types of units for current are _____ or _____.
5. An example of _____ energy is stored chemical energy in the battery.
6. The two types of units for potential difference are _____ or _____.
7. A _____ is a device that uses energy, such as a light or resistor.
8. A _____ circuit has wires that are connected in one pathway.
9. Increasing the length of a wire _____ the resistance of the wire.
10. Wires in you house are made out of _____ because it is a good conductor.

Thinking and Inquiry: Problem Solving answer the following on the back of this page or a separate sheet (10 marks)

Demonstrate what the G.R.A.S.S. method of problem solving in the following questions.(5 marks)

1. If 100 C pass through a light in 60 seconds, what is the current through the light? (2 marks)
2. If the current running through a light is 0.5 A and the voltage is 1.5 V, what is the resistance of the light? (2 marks)
3. If a 3 Volt battery is hooked in series with 2 lights, what would the maximum voltage of each light be? How would this be different if the lights were in series? (2 marks)
4. 3 identical lights and a battery are connected in parallel to each other. If the current flowing through each light is 0.2 A, what is the current flowing through the battery? (2 marks)
5. If the resistance of each light is 4 ohms and the current is 0.8 A what is the voltage of each light (2 marks)