Worksheet - 02 - Basic Electricity

Name:

1. a) What happens to the LED if the resistor is replaced with a wire link.

b) What is the approximate potential difference across the LED when normally lit.

c) It it is safe to pass 10mA through the LED. Calculate a safe value for R. Assume the power supply voltage is 5 Volts.

d) What value of R would you use if your exact calculated value is not available from suppliers.



2. If A_1 reads 3 amps and A_2 reads 1 amp, in amps, what does A_3 read?



3. If A_2 reads 2 amps and A_3 reads 3 amp, in amps, what does A_1 read?



4. If V reads 5 volts, what is the potential difference across R_1 ?



- 5. In what units is charge measured?
- 6. In what units is current measured?

- 7. In what units is potential difference measured?
- 8. When measuring potential, one lead from the volt meter is always connected to _____.
- 9. Giga means 10^x . What is the value of x?
- 10. Kilo means 10^x . What is the value of x?
- 11. Mega means 10^x . What is the value of x?
- 12. Milli means 10^x . What is the value of x?
- 13. Micro means 10^x . What is the value of x?
- 14. Nano means 10^x . What is the value of x?
- 15. Pico means 10^x . What is the value of x?
- 16. In what units is power measured?
- 17. In what units is resistance measured?