

Chapters 17-20 DC Electricity, Cells

PRINT Name _____ Period _____

1. Define: a) Neutral Charge, b) Negative Charge, c) Positive Charge in Modern Terms.
2. Tell how to charge an object a) by Contact and b) by Induction.
3. a) What is a Capacitor, b) Describe how a Capacitor stores electric charge, c) List Three factors of Capacity.
4. State Coulomb's Law of Charges.
5. Explain Six methods to produce electricity.
6. Define these Units: a) Electric Charge, b) The Volt, c) Electric Current, d) Electric Resistance, e) Electric Power, f) Electric Capacitance.
7. a) State Ohm's Law, b) Write the formula, c) Rearrange it to find Volts, d) Rearrange it to find R.
8. State the Four Rules for Resistance.
9. State Kirchhoff's Laws for a) Series Circuits, b) Parallel Circuits.
10. Calculate the Total Resistance in ohms when a 5Ω , a 10Ω , and a 20Ω resistors are connected in a) Series and b) Parallel.
Ans: a) 35Ω b) 2.9Ω .
11. Find the Current in amps when the above are connected to a 12 volt power supply. Ans: a) 0.34amp b) 4.1amp.
12. Find the Power in the above circuits. a) 4.1watt b) 49 watt.
13. a) Describe an Electrochemical Cell. b) How does it get its potential?
14. Discuss the results for voltage and available amperage when Cells are connected a) in Series, b) in Parallel.