

## Review for SCANTRON Exam, Chapters 17-20, Electricity

This is a very comprehensive exam. You must practice well. The biggest danger is Springtime Attitude! Use this as a check off list.

*You must be able to solve the following types of problems:*

Ohm's Law, Kirchhoff's Laws, series-parallel-multiple circuits, capacitance, electric charge, laws of resistance of a conductor, power, volts, amperes, coulombs, watts, ohms, solving circuits. There is a practice exam on your Blitz Program called, *Electricity.txt*.

*You must be able to define, explain, and use the following terms:*

Conductor	Electric field	Electrolysis	Batteries
Insulator	from point source	anode	cells in series
Definition of charges:	between plates	cathode	cells in parallel
Franklin's	Temp equilibrium	Conduction by	cells in multiple
Modern	in heaters & lights	delocalized e <sup>-</sup>	Wheatstone Bridge
Coulomb's Law of	Filament sizes	metals	Electromotive force
Charges	Electrochemical cell	solutions/ions	Methods of making
Capacity of capacitor	electrodes	Rules of resistors:	electricity:
Capacitors	electrolyte	temperature	by friction
Stop DC	ions	length	positive charge
"Passes" AC	Resistance	area	negative charge
Factors of capacitors:	resistor	material	by contact
area of plates	Units of electricity	Ohm's Law	by induction
distance between	coulomb	finding amperage	by half-reactions
dielectric	volt	finding voltage	by magnetism
dielectric constant	ohm	finding resistance	by thermionic
variable capacitor	mho	Circuits:	emission
factors of the	ampere	series	by thermocouple
variable capacitor	watt	parallel	by photoelectric
puncture voltages	1 X 10 <sup>-3</sup> amp is	multiple	by piezoelectric
capacitor microphone	Charges:	Kirchhoff's Laws:	by nuclear decay
capacity formulas:	neutral	series circuits	Finding resistance
in series	positive	parallel circuits	with a voltmeter
in parallel	negative	solving circuits	and an ammeter.
unit of capacity	Electroscopes:	series	
millionth of a unit	pith balls & foil	parallel	Inverse square law
1 X10 <sup>-12</sup> of the unit	charge by contact	multiple	The Demon Observer
effect of dielectric	charge induction	Resistivity formula	The Faraday Cage