

The Electrifying Review

A crossword puzzle grid with 41 numbered starting points for clues. The grid consists of white squares for letters and empty spaces for non-letter characters. The numbers are as follows:

- 1: Down, 10 squares
- 2: Down, 6 squares
- 3: Down, 6 squares
- 4: Down, 6 squares
- 5: Across, 6 squares
- 6: Across, 6 squares
- 7: Down, 4 squares
- 8: Across, 10 squares
- 9: Down, 5 squares
- 10: Across, 6 squares
- 11: Down, 10 squares
- 12: Down, 4 squares
- 13: Down, 4 squares
- 14: Across, 10 squares
- 15: Down, 4 squares
- 16: Across, 6 squares
- 17: Across, 5 squares
- 18: Across, 10 squares
- 19: Down, 5 squares
- 20: Across, 3 squares
- 21: Down, 5 squares
- 22: Across, 6 squares
- 23: Across, 10 squares
- 24: Across, 5 squares
- 25: Across, 10 squares
- 26: Down, 5 squares
- 27: Down, 3 squares
- 28: Across, 10 squares
- 29: Across, 5 squares
- 30: Down, 4 squares
- 31: Down, 4 squares
- 32: Across, 6 squares
- 33: Down, 4 squares
- 34: Across, 6 squares
- 35: Across, 10 squares
- 36: Across, 6 squares
- 37: Across, 5 squares
- 38: Down, 4 squares
- 39: Across, 6 squares
- 40: Across, 4 squares
- 41: Across, 5 squares

Across

- 5 Elements that loosely hold their valence electrons which means that they conduct electricity well.
- 6 The greater the _____ of a wire, the more resistance it has.
- 8 The resistance of a circuit is ___ proportional to the amount of current in a circuit.
- 10 How easy or hard it is for electricity to flow through a conductor.
- 14 Objects that resist the flow of electricity through a circuit.
- 16 An element that holds its valence electrons tightly which makes it a poor conductor.
- 17 These come in AA, AAA, C, and D and all have a voltage of 1.5 volts. They may be combined to make a battery.
- 18 The liquid that both of the chemicals in an alkaline battery are soaked in to create a chemical reaction.
- 20 The law that explains the relationship between current, resistance, and voltage.
- 22 Elements that have characteristics of conductors and insulators and are known as _____ semiconductors.
- 23 What is measured when you use a multimeter to see if a circuit is closed or if it has a break in it.
- 24 The collection of cells that produce the electrical potential difference needed to make electrons flow through the circuit.
- 25 These are switched off by the magnetic field created by a current that is too much for a _____ circuit to handle.
- 29 Hooking 2 batteries in parallel will _____ the current.
- 32 The type of current that comes from an electrical socket in your house.
- 34 The flow of electrons measured with an ammeter,
- 35 Voltage is the difference in electric _____ between 2 points.
- 36 The current of a circuit is ___ proportional to its voltage.
- 37 A circuit that has the same current throughout and splits the voltage between each resistor.
- 39 The type of instrument used to measure the amount of current running through a circuit.
- 40 Type of circuit that happens when a current finds an easier path that contains no resistors.
- 41 Type of current produced by a battery and can be positive or negative.

Down

- 1 An object that does not allow electricity to flow through it easily.
- 2 The units that are used to measure the number of electrons that are flowing through a circuit.
- 3 The path that electrons follow through conductors.
- 4 The end of the battery that loses electrons and gets a positive charge,
- 5 A device that can be used to measure continuity, voltage, resistance, or current.
- 7 A circuit that is not continuous.
- 9 Most alkaline cells have an electric potential of 1.5 _____.
- 11 Substances that have zero resistance at low (0-70 K) temperatures.
- 12 Units used to measure the frequency of an alternating current.
- 13 Units used to measure resistance.
- 15 Instrument used to measure the electric potential of a circuit.
- 17 A circuit that is continuous and allows electricity to flow through it.
- 19 The electrical "pressure" that causes electricity to flow through a circuit.
- 21 A device used to open and close circuits.
- 26 The type of energy that a battery produces.
- 27 Device used to shut down a circuit that is carrying too much current by melting a piece of metal, opening the circuit.
- 28 The bigger the _____ of a wire, the lower the resistance of the wire.
- 30 A circuit that uses more power because each branch has more current and voltage.
- 31 0.001 amperes
- 33 Outlet that monitors the amount of current leaving from and returning to the outlet and breaks the circuit if the amounts of current are not equal.
- 38 The end of the battery that the free electrons collect at.