## Matching-Circuit Starter Kit



- 1. \_\_\_\_Photoresistor
- 2. \_\_\_\_ Multimeter
- 3. \_\_\_\_ Button Switch



- 4. \_\_\_\_ Breadboard
- 5. \_\_\_\_ 4511
- 6. \_\_\_\_ 7 Segment Display
- 7. \_\_\_\_ Buzzer
- 8. \_\_\_\_ Capacitors
- 9. \_\_\_\_ Diode

10. LED



- 11. \_\_\_\_ 555 Timer
- 12. \_\_\_\_ 4017
- 13. \_\_\_\_ Transistor
- 14. \_\_\_\_ RGB LED
- 15. \_\_\_\_ Wires
- 16. \_\_\_\_ Resistor
- 17. \_\_\_\_ Speaker
- 18. \_\_\_\_ Potentiometer
- 19. \_\_\_\_ Battery



- **a.** emits red, green, or blue light when electricity flows through it. Allows electricity to flow in only one direction
- **b.** a resistor that has a knob that can be adjusted to vary the resistance
- c. allows electricity to flow through it on only one direction
- **d.** displays numbers or letters by lighting up a combination of light segments, based on voltage received at the pins
- **e.** a light sensitive resistor that changes resistance with the amount of light present
- **f.** can be used like a switch allowing current to flow from collector to emitter when voltage is applied to the base
- **g.** makes a 7 Segment Display show the correct number in response to a 4-bit binary input.
- **h.** used to connect or disconnect the path of electrical flow in a circuit
- **i.** makes a singular buzzing sound when a voltage is applied across the leads.
- **j.** makes a wide variety of sounds based on the electric signals provided to the leads.
- k. used to measure voltage, current, and resistance
- I. can absorb energy and store it temporarily
- **m.** a common tool used for creating temporary electronic prototypes and experimenting with circuit design.
- **n.** an electrical component that restricts the passage of electrical current. Colored strips show its fixed resistance value
- o. creates repeating pulses of electricity
- **p.** a device that converts chemical energy contained within into electric energy
- **q.** conductive metal that is wrapped in insulated material that brings electricity to various components in the circuit
- **r.** a light emitting diode that allows electricity to flow in only one direction
- s. counts electrical pulses from 1 to 10



SQUARE BRAIN



