

Burglar Alarms Shopping List

eCamp Electric Lab

Materials for Younger Students (Grades K-4)

- Small square of aluminum foil
 - 1" square sponge square of squishy foam (or thin sponge) that reforms into shape when released
 - 2 large paper clips
 - [CdS cell](#) (RS #276-1657)
 - Red laser pointer (from Unit 9) or flashlight
 - wooden spring-type clothespin
 - 2 unpainted steel thumbtacks
 - Thin steel wire (or you can use aluminum foil or a ripped apart alligator clip wire)
 - Un-insulated wire coat hanger (use sand paper to get the clear enamel off)
 - Several small paper clips
 - Film canister or similar
 - Stuff from *Electricity Lab*
 - Tape
 - Scissors
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Materials for Older Students (Grades 5-12) Parts can be ordered from Radio Shack or visit our website to order these parts from us (we'll also include a DVD and all the parts below except the 9V battery).

- Breadboard (2"x3", 400-hole) (Radio Shack [#276-003](#))
- Digital Multimeter (same one from Units 10, 11, and 12) (Radio Shack [MultiMeters](#))
- Hookup wire (AWG 22g, solid), 6 feet (RS [#278-1215](#))
- CdS Photocell (RS [#276-1657](#))
- 100-ohm resistor (1/4 W) (RS [#271-1311](#))
- 1K-ohm resistor (1/4 W) (RS [#271-1321](#))
- 4.7K-ohm resistor (1/4 W) (RS [#271-1330](#))
- 5.6K-ohm resistor (1/4 W) (RS [#271-1125](#))
- 10K-ohm resistor (1/4 W) (RS [#271-1335](#))
- 100K-ohm resistor (1/4 W) (RS [#271-1347](#))
- PN2222 or 2N3904 (NPN) transistor (RS [#276-1617](#))
- 2N3906 or 2N4403 (PNP) transistor (RS [#276-1604](#))
- 0.47 μ f electrolytic capacitor (>10V) (Substitute: 1 μ f at RS [#272-996](#))
- 10 μ f electrolytic capacitor (6V) (RS [#272-999](#))
- 0.01 μ f capacitor (RS [#272-131](#)) [capacitor code: 103]
- Bi-polar red/green LED with 2 leads (RS [#276-012](#))
- 10 alligator clip wires (RS [#278-1157](#))
- Electric buzzer (3-6V) (RS [#273-053](#))
- 8-ohm speaker (RS [#273-092](#))
- AA battery case that holds 2 AA's (RS [#270-408](#))
- 9V battery snap (RS [#270-325](#))
- 9V battery (alkaline battery recommended)
2 AA's batteries (Cheap dollar-store brand recommended that say "Heavy Duty" - you want the cheapest ones they have. **Do NOT use alkaline batteries: NO Duracell or Energizer!**)