


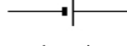

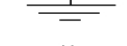

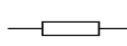
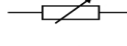
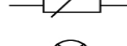

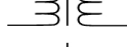


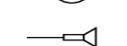






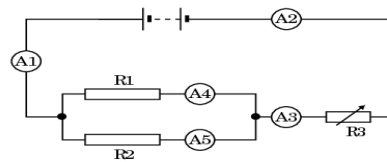


Electrical Circuit Diagrams

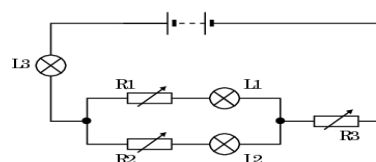
-  wires crossing
-  wires connected
-  open switch
-  cell (+ on right)
-  battery (+ on left)
-  earth
-  capacitor
-  fuse
-  fixed value resistor
-  variable resistor
-  thermistor
-  lamp
-  transformer
-  relay coil
-  ammeter
-  voltmeter
-  loudspeaker
-  electric bell
-  diode rectifier
-  light-dependent resistor
-  light-emitting diode

Detecting current



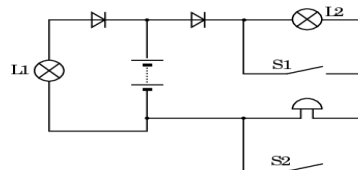
$$A1 = A2 = A3 = (A4 + A5)$$

Changing light intensity



Increasing $R1$ makes $L1$ dim, but $L2$ brightens;
 $L3$ is unchanged
 Increasing $R2$ makes $L2$ dim, but $L1$ brightens;
 $L3$ is unchanged
 Increasing $R3$ makes all lamps dim

Switches and diode rectifiers



S1	S2	L2	Bell
Open	Open	Lit	Rings
Open	Closed	Lit	Silent
Closed	Open	Off	Rings
Closed	Closed	Off	Silent

L1 is always off