

## Light Sensor

### Discover

There is a special type of resistor that changes its value based on the amount of light it sees. That is, a circuit with this Light Dependent Resistor (LDR) will change in light or shade.

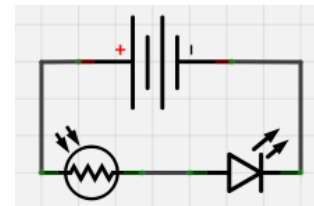
### Learn

As the LDR gets more light, its resistance decreases, taking less voltage/current. Conversely covering the LDR from light increases its resistance to its maximum value (no light).

### Apply

Similar to ELEC1-LED\_Out, build a circuit that starts from +5V, goes through a LDR, then the +side of LED (**longer leg**), finally back to the power source's ground (GND).

Be sure to verify all wires when checking the circuit.



### Teach

Find another who is using the LDR, does their LED shine similarly to yours?

Share some ideas for applications of LDR's or experimenting with them, then try modifying/expanding the circuit to incorporate these ideas/experiments.

### Discover

The Arduino can be used to get an indication of light via an LDR, this is done using analogue inputs (ARD2-LDR\_In)