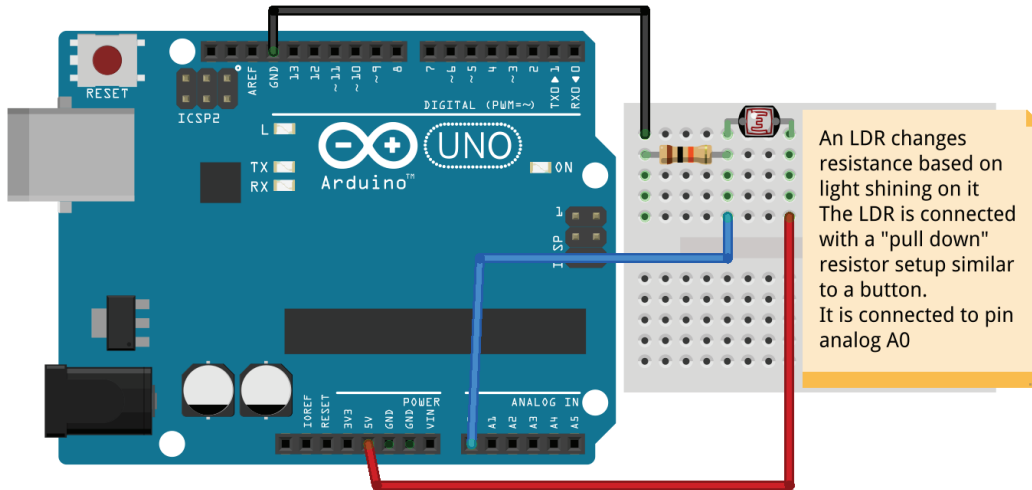


## Basic Information

An LDR (Light dependent resistor) is a component that's level of resistance depends on the amount of light hitting it. The more light, the less resistance. It is very useful for creating circuits that react to light.

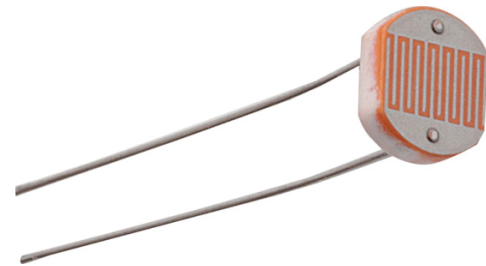
An LDR is basically a resistor that changes based on light falling on it.



fritzing



10,000 ohm resistor (10k)



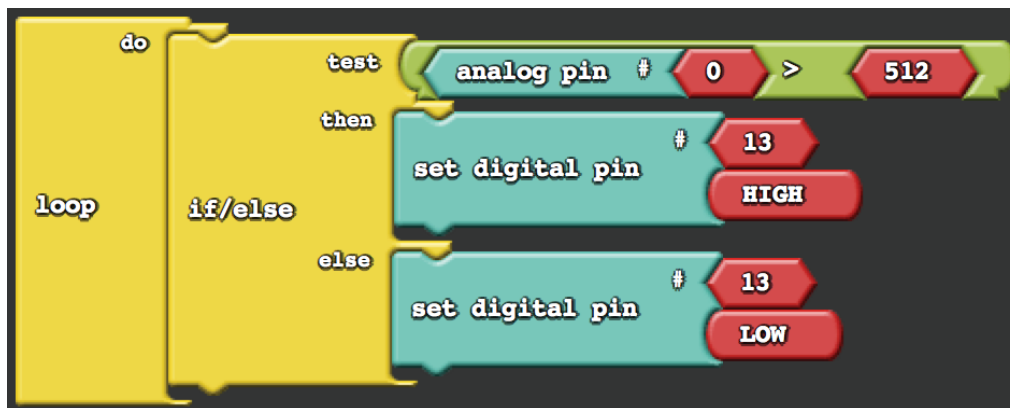
Light dependent resistor

## Reacting to light

After wiring it up as in the above diagram, next step is to create some way to test our light level. The test in the code checks if the result from the analog pin is greater than 512.

Analog pins allow you to sense between 0 and 1024. The code to the left checks if it is in the top half, aka between 512 and 1024. If it is between those values, the LED on pin 13 (built in one) is turned on.

If it is between 0 and 512, then the LED on pin 13 will be turned off.



## Now try

1. Try experimenting with the 512 value above, what happens when you change it?
2. Try create a basic night light, when you cover the LDR, the LED should come on
3. Try experimenting with Serial println with the value of analog pin 0. (You may need to use glue)