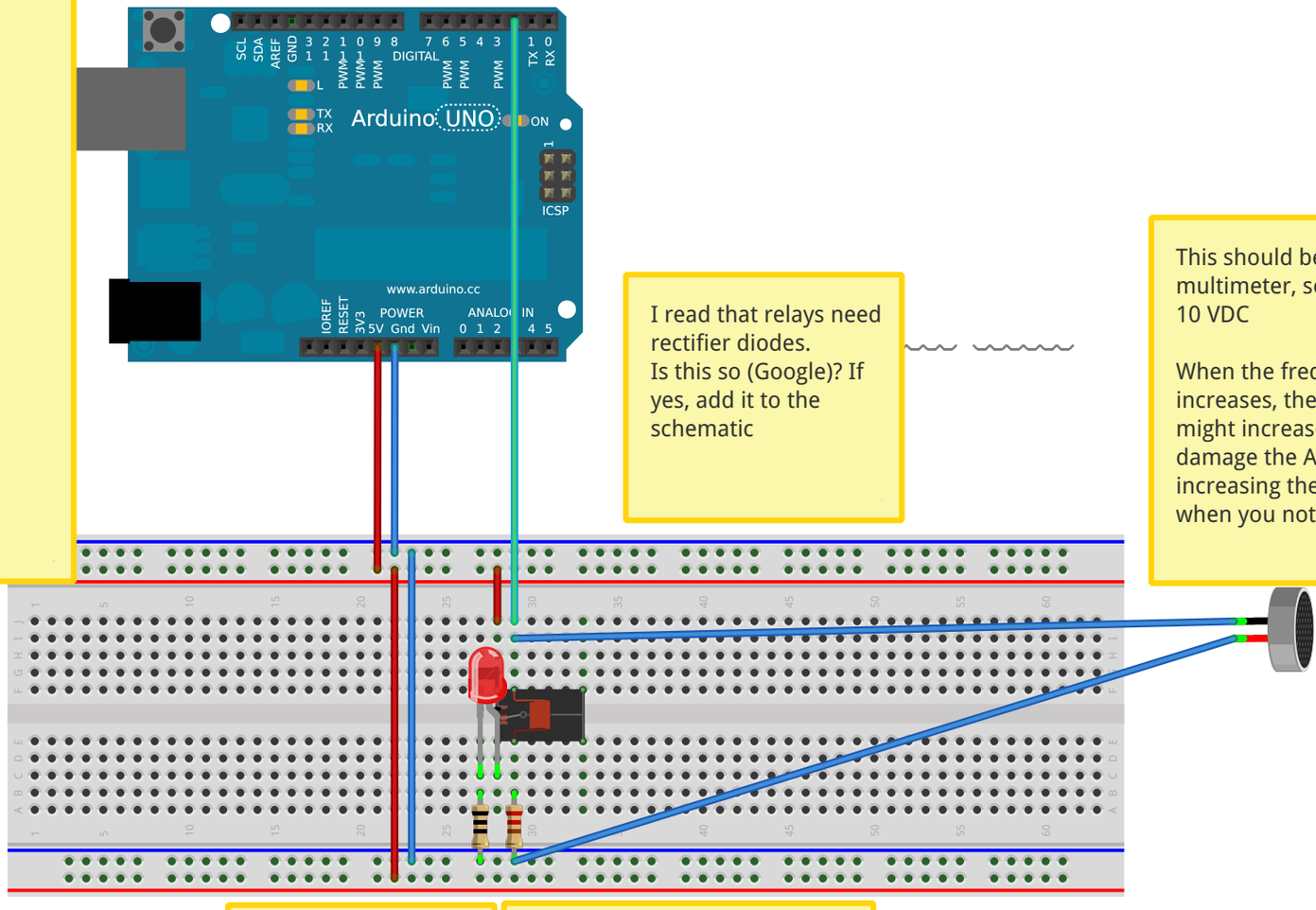
OpenPCR task 2: find out the maximum switching frequency of the relay

```
#include <assert.h>

const int pin = 2; // digital pin number 2

void setup()
{
  setPin(pin,OUTPUT)
}

void loop()
{
  const double frequency = 1.0; //Change this
  assert(frequency != 0.0);
  const double period = 1.0 / frequency;
  digitalWrite(pin,HIGH);
  delay(period);
  digitalWrite(pin,LOW);
  delay(period);
}
```



I read that relays need rectifier diodes.
Is this so (Google)? If yes, add it to the schematic

This should be a multimeter, set to 10 VDC

When the frequency increases, the voltage might increase! This might damage the Arduino. Stop increasing the frequency when you notice this!

The LED will burn if the relay is closed due to current from Arduino pin 2

I believe the resisor should have 220 ohm, but try yourself: if the LED becomes hot, increase the resistance :)

The relay switching port must be connected to ground with a resistance (otherwise it will short-circuit). Try to find the resistance with the highest possible value that yields reliable switching