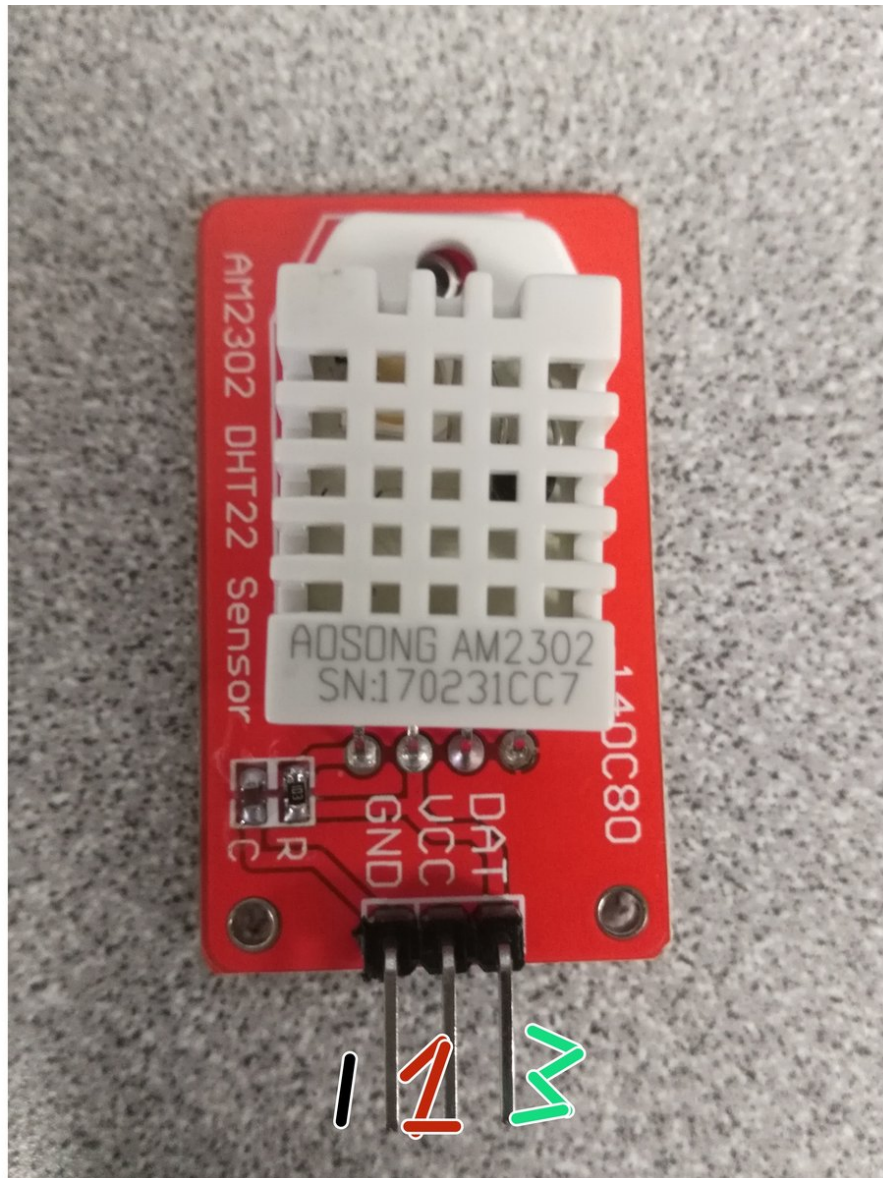


brandeismakerlab

# How to Humidity and Temperature

This guide will walk you through how to use an AM2302/DHT22 sensor

Written By: Daniel Lay





## TOOLS:

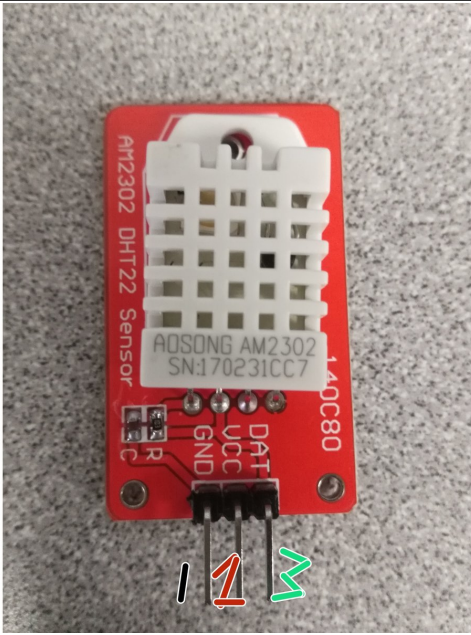
- [PC with Windows 10](#) (1)
- [Arduino UNO](#) (1)



## PARTS:

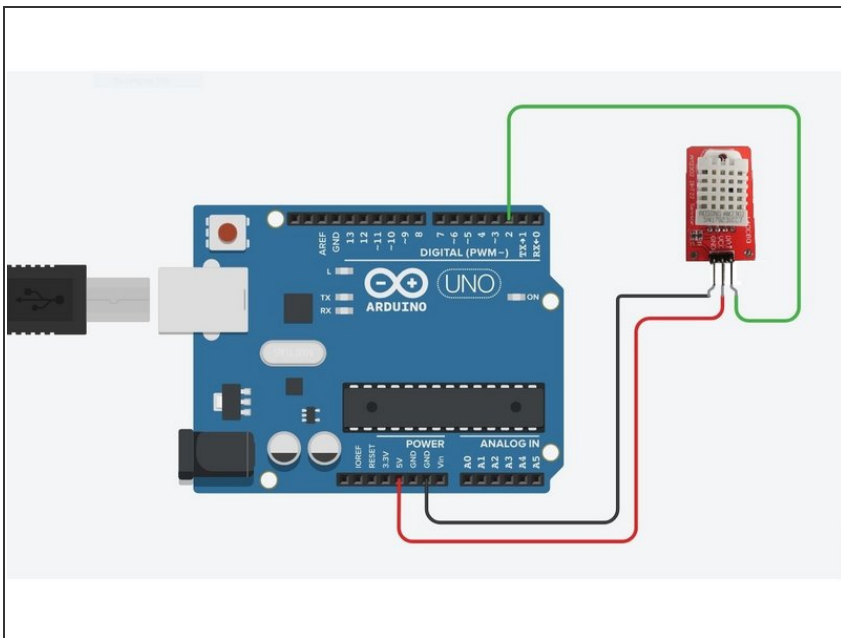
- [jumper wire](#) (3)
- Male to Female**
- [AM2302 / DHT22 sensor](#) (1)
  - [USB 2.0 A-Male to B-Male Cable](#) (1)

## Step 1 — Grab starting materials and plug in



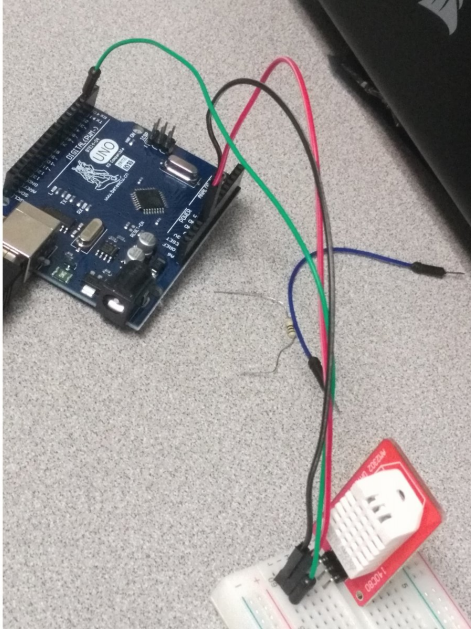
- Start by grabbing the three jumper cable wires.
- Plug in each wire to the three different prongs of the AMS302/DHT22 sensor
- 1: Ground (GND) [BLACK]
- 2: 5v power (VCC) [RED]
- 3: pin 2 (DAT) [GREEN]

## Step 2 — Schematic to see layout better



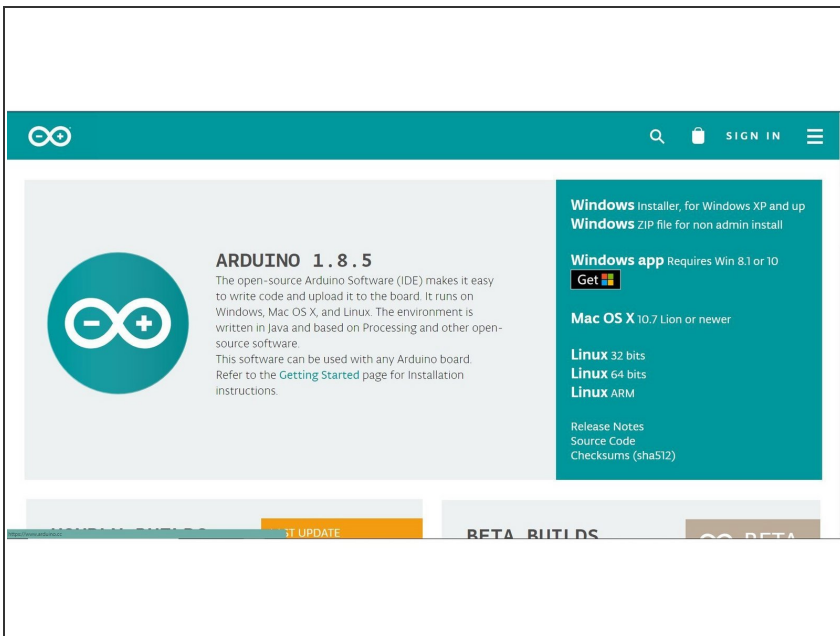
- This is the same thing as the previous slide, but the cables are shown plugged in

## Step 3 — Arduino Set up



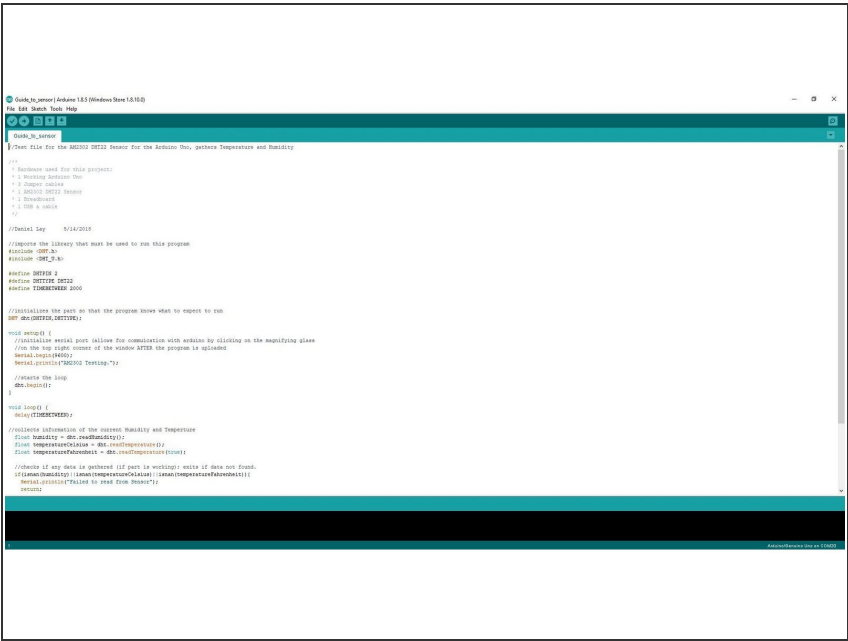
- Grab your laptop, Arduino, and an USB 2.0 A-Male to B-Male Cable
  - Plug the USB A end to the laptop
  - Plug the USB B end into the Arduino Uno
- i** I did use a breadboard here but it is unnecessary as there are no resistors used. You can do either.

## Step 4 — Open up Arduino IDE



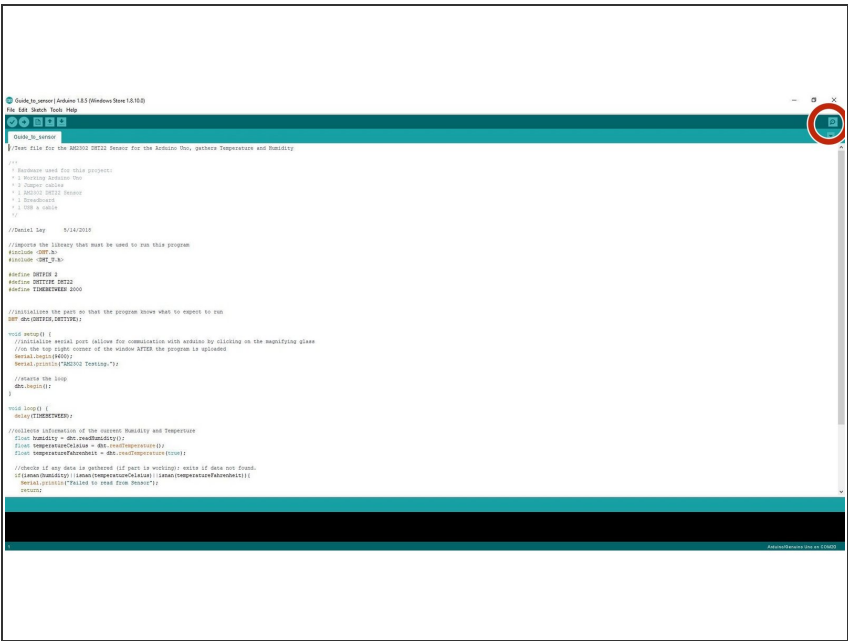
- Download the Arduino IDE if you have not already:  
<https://www.arduino.cc/en/Main/Software>
- Once downloaded, open up the application and continue to the next section

## Step 5 — Grab some source code to test the part!



- Here is some source code that runs basic processes to see if the hardware works
- GitHub link: <https://github.com/BrandeisMakerLab/Ardu...>
- Make sure that you select the correct board and port (under the tools section)
- Verify and Upload the code to the Arduino

## Step 6 — Start using the code!



- Click the magnifying glass on the top right corner to access the Serial Monitor.

Step 7 — Finished.

- Congratulations! you have successfully used the AM2302/DHT22 sensor, go have fun!

