**Tutorial Critiques “Hardware”**

**Videos and Web sites for Electronics class**

**MAKE presents and Collin’s LAB**

**Directions: In your Engineering Notebook write at least two full sentences on what you “Liked”, and or “Disliked” about the video tutorial / web site. Also write any Questions you have that arose from the tutorial / website.**

**1) Batteries**

[**https://www.youtube.com/watch?v=8ftkn7nZSDo**](https://www.youtube.com/watch?v=8ftkn7nZSDo)

# 2) Binary & Hex

# <https://www.youtube.com/watch?v=jvx-NrILgpE>

**3) Switches**

[**https://www.youtube.com/watch?v=S2AHimvbovI**](https://www.youtube.com/watch?v=S2AHimvbovI)

**4) Ohm’s LAW**

[**https://www.youtube.com/watch?v=-mHLvtGjum4**](https://www.youtube.com/watch?v=-mHLvtGjum4)

**5) Multi Meters**

<https://www.youtube.com/watch?v=SLkPtmnglOI>

**6) Electronic Tools**

[**https://www.youtube.com/watch?v=J-1phA\_vKDg**](https://www.youtube.com/watch?v=J-1phA_vKDg)

**7) Schematics**

[**https://www.youtube.com/watch?v=9cps7Q\_IrX0**](https://www.youtube.com/watch?v=9cps7Q_IrX0)

# 8) Perforated-board Prototyping

# <https://www.youtube.com/watch?v=3N3ApzmyjzE&index=37&list=PLECC9C55893C696A7>

**9) Inductors**

[**https://www.youtube.com/watch?v=STDlCdZnIsw&list=PL774BE597B77BF3C5**](https://www.youtube.com/watch?v=STDlCdZnIsw&list=PL774BE597B77BF3C5)

**10) Resistors**

[**https://www.youtube.com/watch?v=VPVoY1QROMg&list=PL774BE597B77BF3C5&index=3**](https://www.youtube.com/watch?v=VPVoY1QROMg&list=PL774BE597B77BF3C5&index=3)

**11) Diodes**

[**https://www.youtube.com/watch?v=AqzYsuTRVRc&list=PL774BE597B77BF3C5&index=6**](https://www.youtube.com/watch?v=AqzYsuTRVRc&list=PL774BE597B77BF3C5&index=6)

**12) LED**

[**https://www.youtube.com/watch?v=P3PDLsJQcGI**](https://www.youtube.com/watch?v=P3PDLsJQcGI)

**13) IR emitters**

[**https://www.youtube.com/watch?v=Co9mhYp0anA&index=16&list=PLECC9C55893C696A7**](https://www.youtube.com/watch?v=Co9mhYp0anA&index=16&list=PLECC9C55893C696A7)

**14) Capacitors**

[**https://www.youtube.com/watch?v=ZYH9dGl4gUE**](https://www.youtube.com/watch?v=ZYH9dGl4gUE)

**15) Transistors**

[**https://www.youtube.com/watch?v=-td7YT-Pums**](https://www.youtube.com/watch?v=-td7YT-Pums)

**16) Arduino Boards**

[**https://www.youtube.com/watch?v=pnf8ojsK6S4&index=5&list=PLECC9C55893C696A7**](https://www.youtube.com/watch?v=pnf8ojsK6S4&index=5&list=PLECC9C55893C696A7)

**17) Arduino and Piezo**

[**https://www.youtube.com/watch?v=K8AnlUT0ng0**](https://www.youtube.com/watch?v=K8AnlUT0ng0)

**and**

[**https://www.youtube.com/watch?v=1\_LMAgO14z0**](https://www.youtube.com/watch?v=1_LMAgO14z0)

**and**

[**https://www.youtube.com/watch?v=Vk1fpPXUIJU**](https://www.youtube.com/watch?v=Vk1fpPXUIJU)

# 18) Contact Microphone Piezo

[**https://www.youtube.com/watch?v=aOJuCYgmPPE**](https://www.youtube.com/watch?v=aOJuCYgmPPE)

**19) Bluetooth low energy**

[**https://www.youtube.com/watch?v=ItV08vGqACM&index=2&list=PLECC9C55893C696A7**](https://www.youtube.com/watch?v=ItV08vGqACM&index=2&list=PLECC9C55893C696A7)

**20) Soldering**

[**https://www.youtube.com/watch?v=QKbJxytERvg&index=11&list=PLECC9C55893C696A7**](https://www.youtube.com/watch?v=QKbJxytERvg&index=11&list=PLECC9C55893C696A7)

**or**

[**https://www.youtube.com/watch?v=QzoPxvIM2qE&list=PLECC9C55893C696A7&index=3**](https://www.youtube.com/watch?v=QzoPxvIM2qE&list=PLECC9C55893C696A7&index=3)

**21) USB Hacking with Arduino**

[**https://www.youtube.com/watch?v=kfCDjwHBBuM&list=PLECC9C55893C696A7&index=31**](https://www.youtube.com/watch?v=kfCDjwHBBuM&list=PLECC9C55893C696A7&index=31)

**22) PWM**

[**https://www.youtube.com/watch?v=Lf7JJAAZxEU&index=22&list=PLECC9C55893C696A7**](https://www.youtube.com/watch?v=Lf7JJAAZxEU&index=22&list=PLECC9C55893C696A7)

# 23) Surface Mount Devices

[**https://www.youtube.com/watch?v=ihoX7x0RBz8&list=PLECC9C55893C696A7&index=36**](https://www.youtube.com/watch?v=ihoX7x0RBz8&list=PLECC9C55893C696A7&index=36)

**24) Arduino electromagnetic field protector**

[**https://www.youtube.com/watch?v=y1Bke3750WE&index=50&list=PLECC9C55893C696A7**](https://www.youtube.com/watch?v=y1Bke3750WE&index=50&list=PLECC9C55893C696A7)

# 25) Oscilloscope

# <https://www.youtube.com/watch?v=SxZWcku_Sw0&index=25&list=PLECC9C55893C696A7>

# 26) The Integrated Circuit

# <https://www.youtube.com/watch?v=uSRIc-sEgPw>

**27) Arduino controlled Relay (making Smart Devices)**

[**http://www.instructables.com/id/Driving-a-Relay-With-an-Arduino/?utm\_source=FEED\_EMAIL&utm\_medium=email&distinctId=MLVPW7FIJ1RNZ20**](http://www.instructables.com/id/Driving-a-Relay-With-an-Arduino/?utm_source=FEED_EMAIL&utm_medium=email&distinctId=MLVPW7FIJ1RNZ20)

**28 Is not a video. It is a site that has ideas for Arduino Projects**

**28) Arduino 101 Project HUB** [**https://create.arduino.cc/projecthub/products/arduino-101-genuino-101**](https://create.arduino.cc/projecthub/products/arduino-101-genuino-101)