

Purchase your Arduino and electronics
ASAP!

<https://sdacs.ucsd.edu/~icc/index.php>

* This will not be the only electronics
you need, you will need to purchase
more in the future

Syllabus

VIS 147

Intro to Electronics

First a bit of history

Electronics in Art

Goes by many names:

- Digital Art
- Computer Art
- Web Art
- Electronic Art
- Television Art
- Etc, etc,

*Art historians have not yet set strict definitions

Ant Farm, Media Burn, 1975

Closed circuit TV art

- <http://www.youtube.com/watch?v=U53-Sfnqwss>

RTMark, Barbie Liberation Organization, 1993

Student from UCSD!

Art + activism / hacktivism

- <http://www.youtube.com/watch?v=OVT4T7OR3iQ>

Kelly Dobson, Blendie 2003-04

Performance Electronics

- http://web.media.mit.edu/~monster/blendie/dobson_blendie_small.mov

Hennessy Youngman, Art Thoughtz, 2011

Youtube + Art Critique / Art History

- <http://www.youtube.com/watch?v=Rb8oNlAqiLw&feature=relmfu>

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Electronic Components

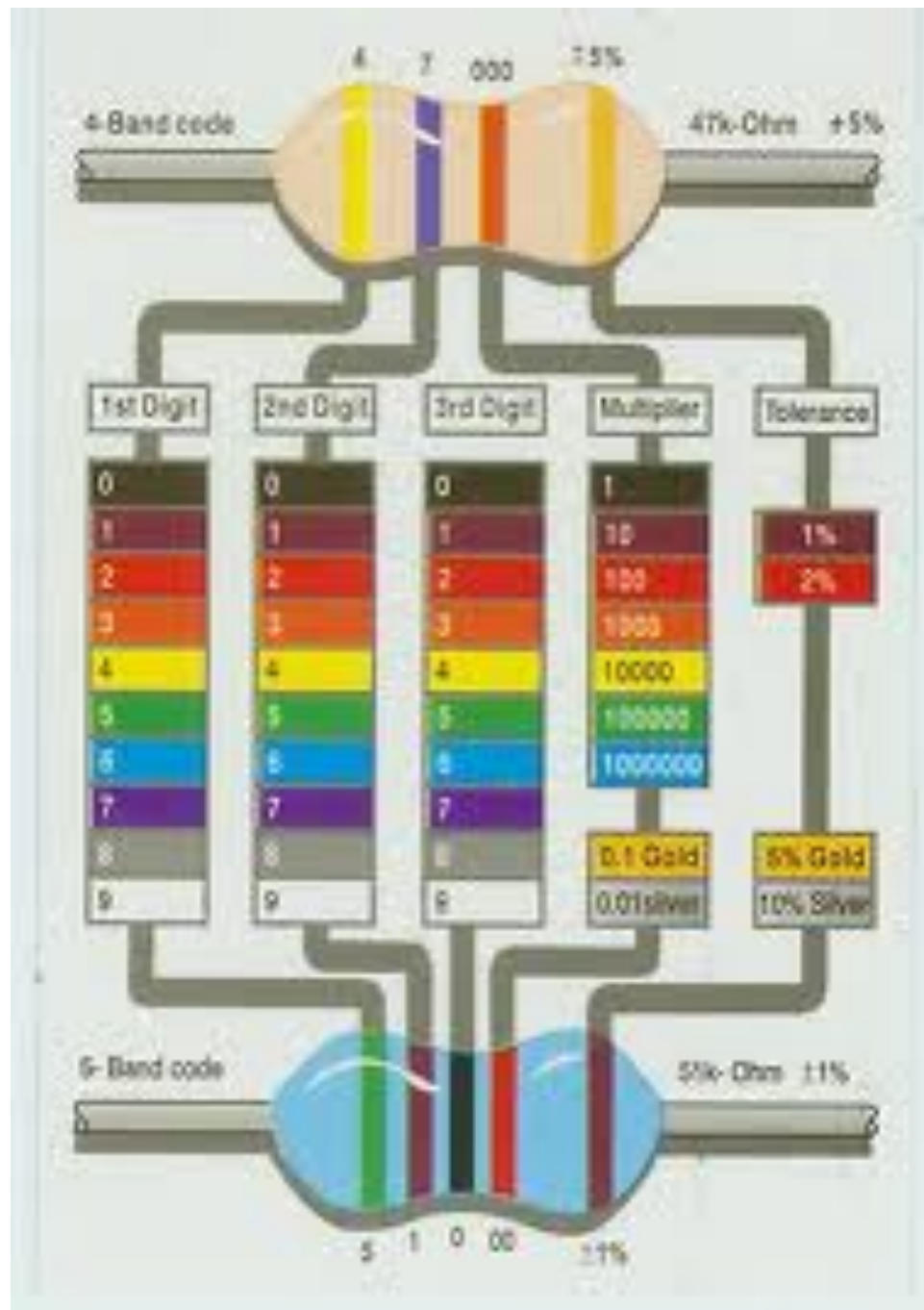
Batteries



Resistor



Resistor



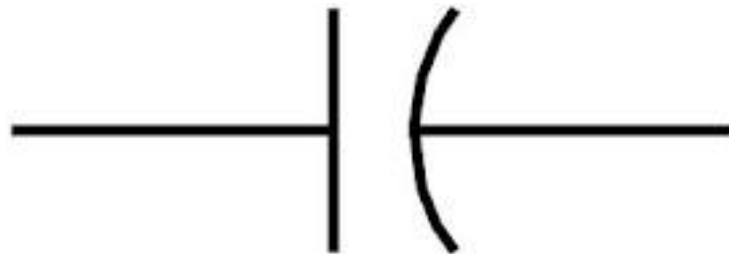
Why you care about resistance

Ohm's Law

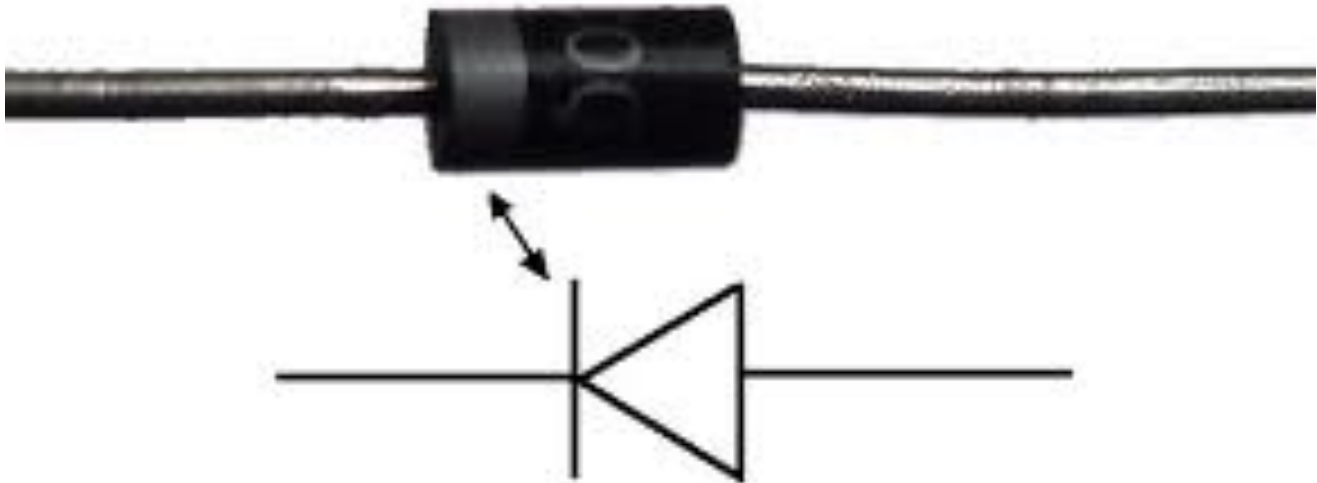
- $V = I \times R$
- $V = \text{Voltag}$
- $I = \text{Current measured in Amps}$
- $R = \text{Resistance measured in Ohms}$

- Also $R = V/I$
- Also $I = V/R$

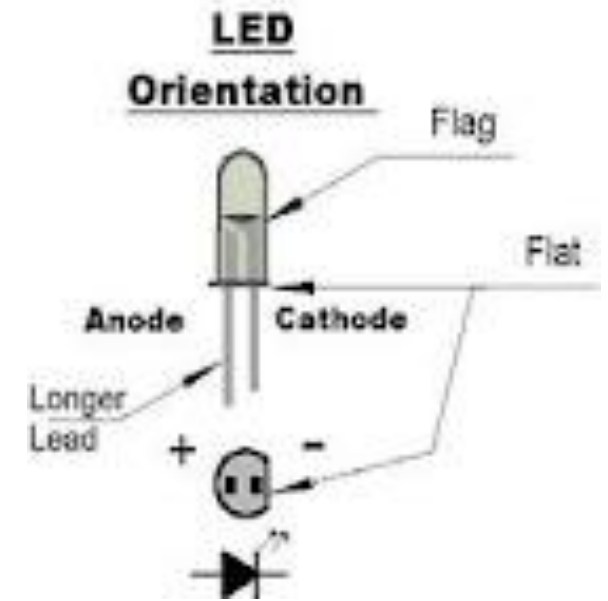
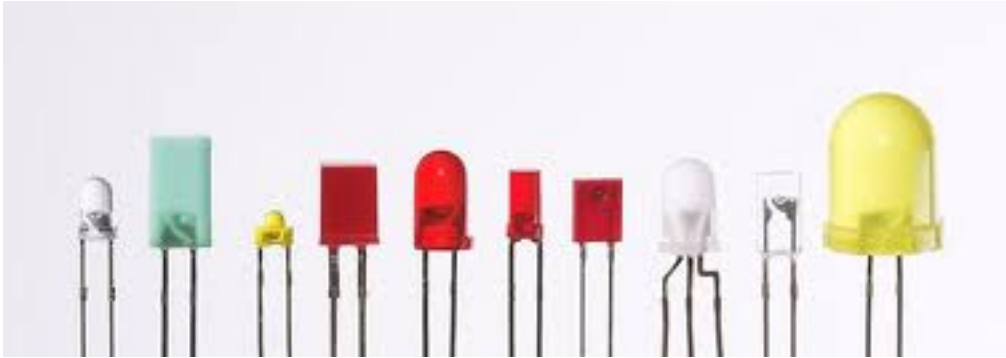
Capacitor



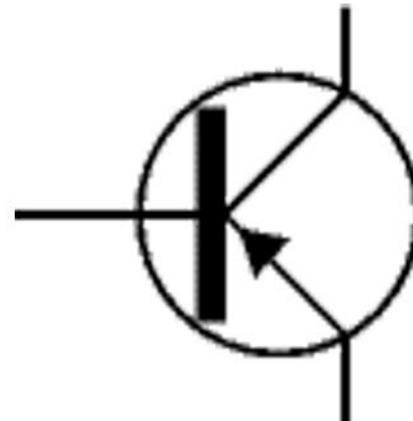
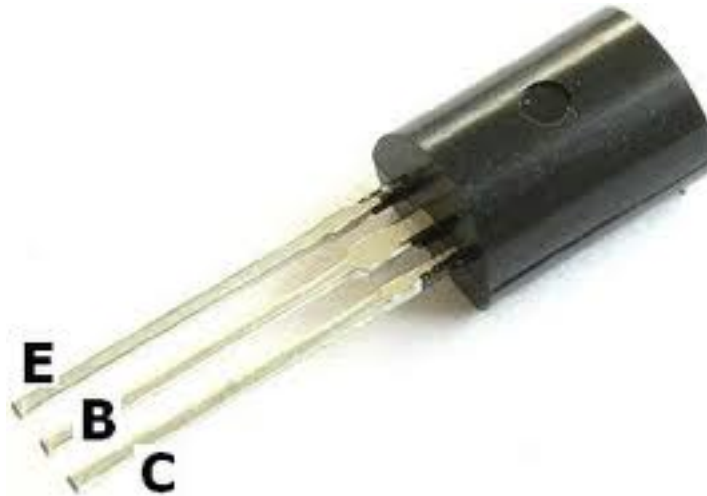
Diode



LED



Transistor



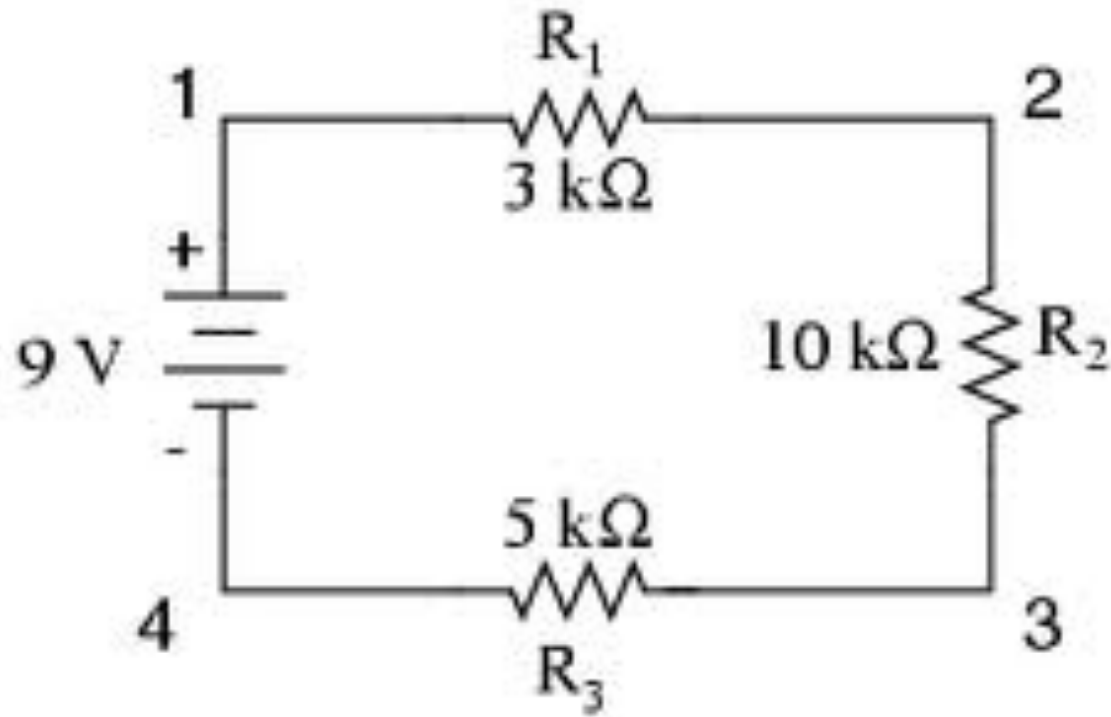
Transistor

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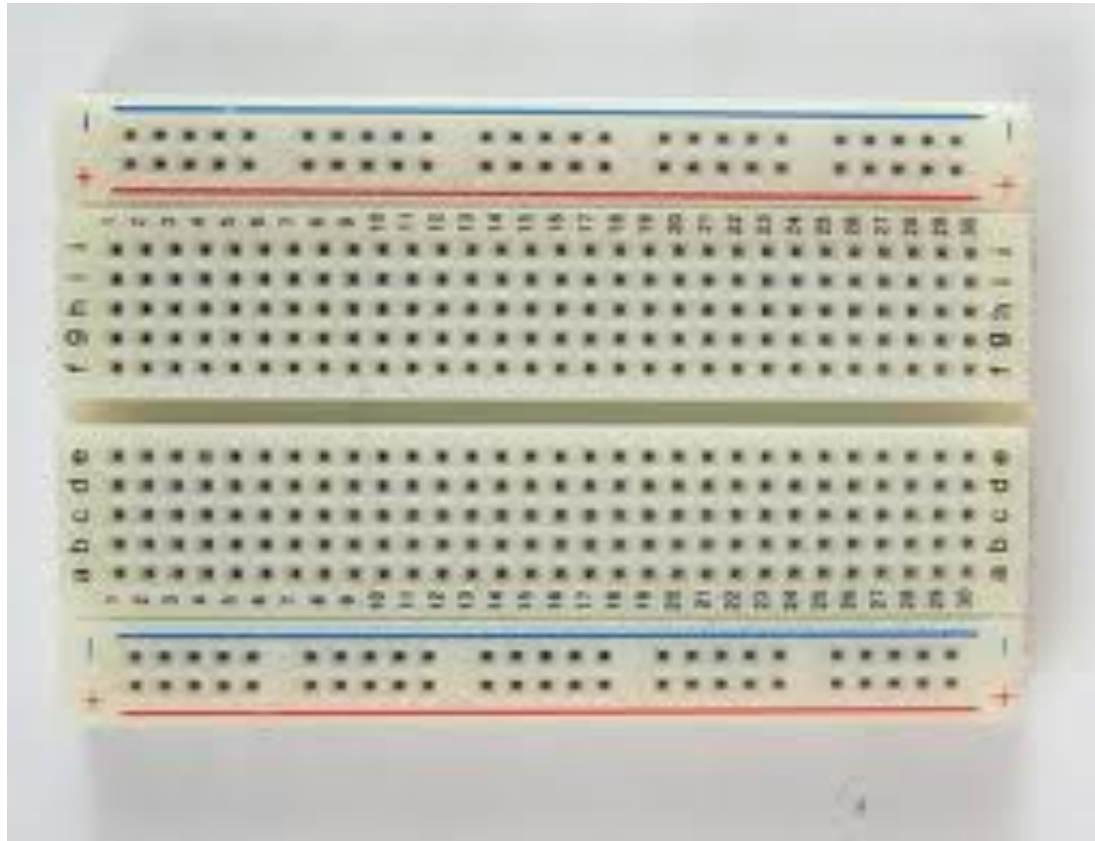
<https://sdacs.ucsd.edu/~icc/index.php>

Circuit

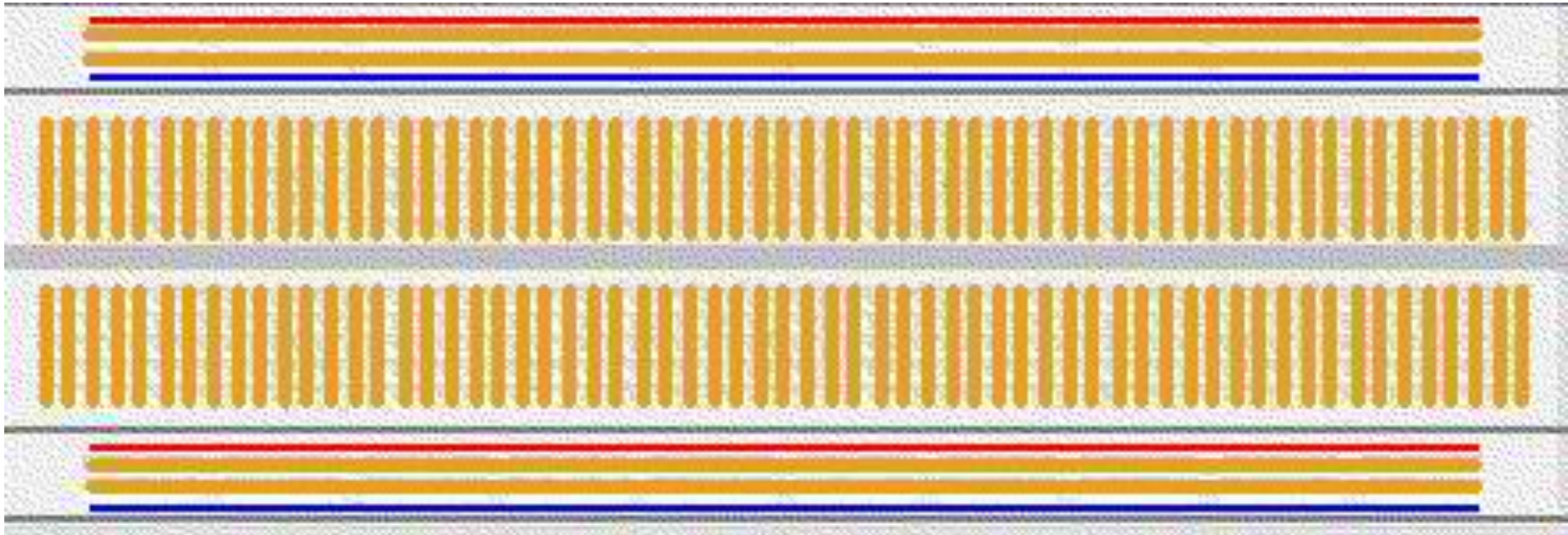
- Comes from the Greek word circle



Breadboard



Inside a Breadboard



Jumper Wire

Arduino

- It's a microcontroller
- It's a breakout board for an ATMEGA chip
- It's open source
- There are many derivatives

- As your homework – you need to buy one

Arduino



A word of caution



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*Pass out readings