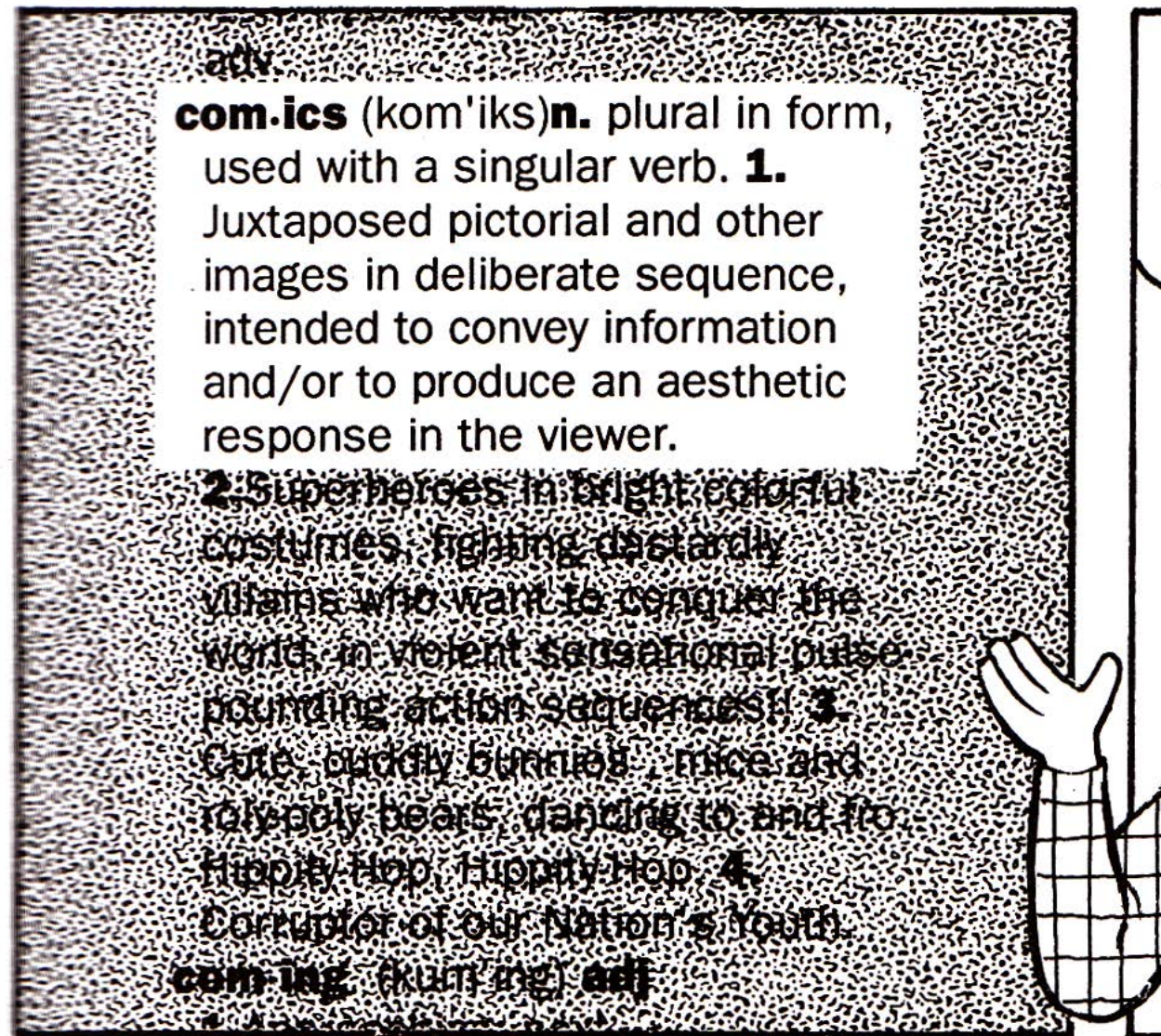


Making and Drawing: Comics in the DIY/Maker World

Jody Culkin
SXSWi 2013
#DIYcomics



Understanding Comics. Scott McCloud 1993

adv.

com.ics (kom'iks)**n.** plural in form, used with a singular verb. **1.**

Juxtaposed pictorial and other images in deliberate sequence, intended to convey information and/or to produce an aesthetic response in the viewer.

2. Superheroes in bright colorful costumes, fighting dastardly villains who want to conquer the world, in violent sensational pulse-pounding action sequences! **3.**

Cute, cuddly bunnies, mice and roly-poly bears, dancing to and fro. Hippy Hop, Hippy Hop. **4.**

Corruptor of our Nation's Youth.

com-ing (kum'ing) **adj.**



Understanding Comics. Scott McCloud 1993

BOEING 767-300

Инструкция по безопасности

Safety instructions

Sicherheitsvorschriften

Consignes de sécurité

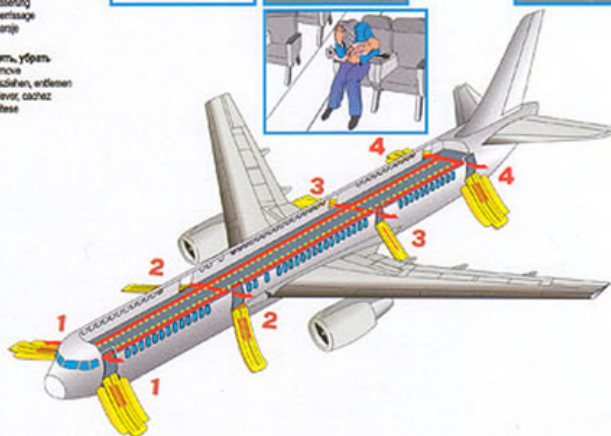
Consignas de seguridad

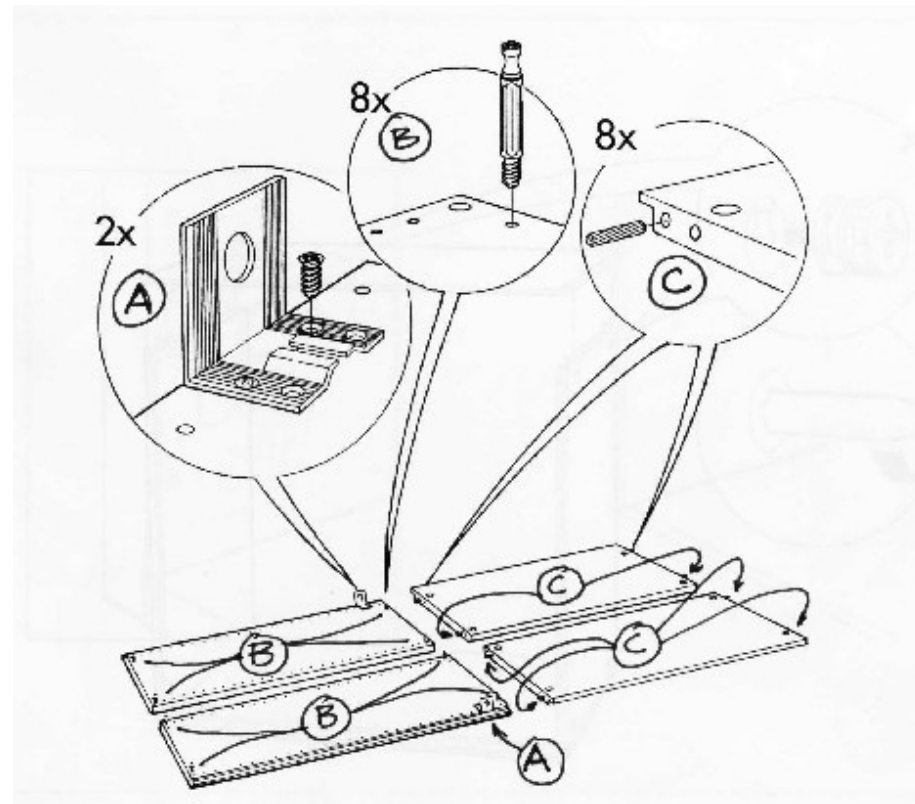
В соответствии с международными требованиями, Вам предлагается ознакомиться с порядком использования аварийно-спасательного оборудования. Вам необходимо выполнять все указания экипажа и световых табло.

In accordance with the international regulations we suggest that you get acquainted with the procedure of the safety equipment usage. Follow the directions of the crew and the signs.

 Взлет и посадка Take off and landing Start und Landung Decolage et atterissage Despegue y aterrizaje		
 Не курить No smoking Nicht rauchen Ne pas fumer No fumar		
 Во время полета During the flight Während des Fluges Pendant le vol Durante el vuelo		
OXYGEN		
 Не курить No smoking Nicht rauchen Ne pas fumer No fumar		
 Аварийная посадка Emergency landing Notlandung Aterrisage forcé Aterrizaje forzoso		
 Аварийная посадка на воду Ditching Wasserung Aterrisage Anaraje		
 Снять, убрать Remove Ausziehen, entfernen Enlever, cacher Quitar		

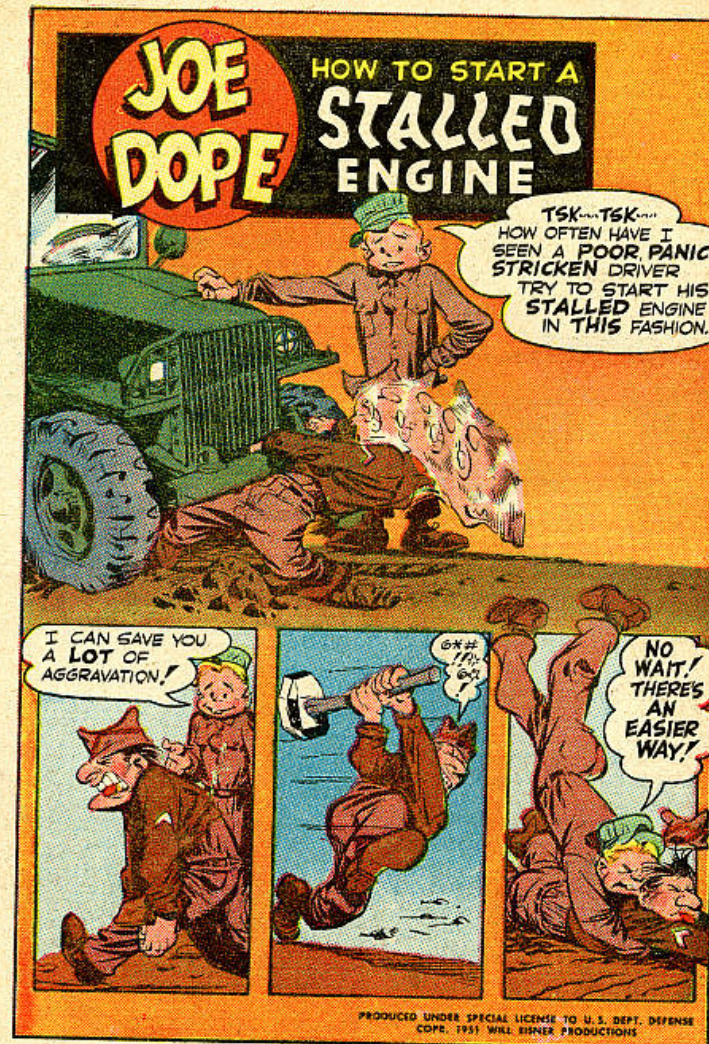
BOEING 767-300







Preventive Maintenance Monthly.
Will Eisner American Visuals Corporation 1951



Preventive Maintenance Monthly.
Will Eisner American Visuals Corporation 1951

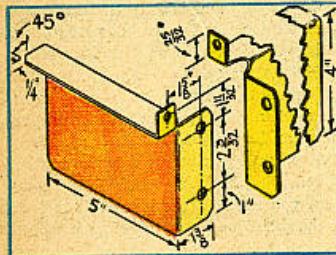


Fig. 8—Three bolts to take out and put back and you've taken the heat off the oil-filter oil-lines with this hose shield.

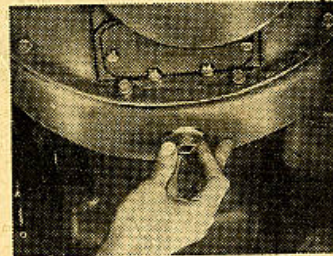


Fig. 9—Flywheel housing got to have drain plug when fording. Got to not have drain plug when not fording. Otherwise . . . UGH!

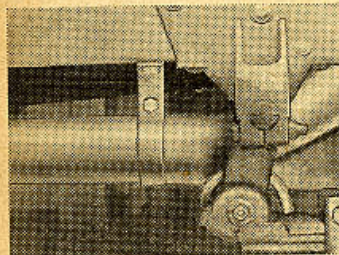


Fig. 10—This is the exhaust-pipe clamp removed by OTAC crews to keep from breaking manifold bolts. Please to leave it off.

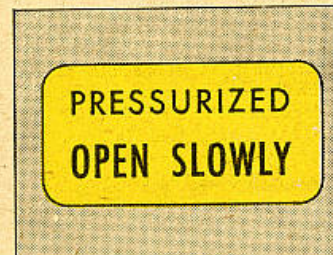


Fig. 11 — Here's your reminder to remove caps slowly from pressurized tanks. Yours should be along in decal form any time now

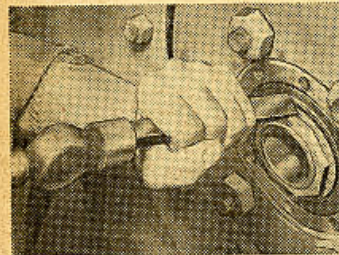


Fig. 12 — So there is no mistake about what P.S. said to do, this is **not** the way to peen axle-nut locks. Scram wid dat chisel.

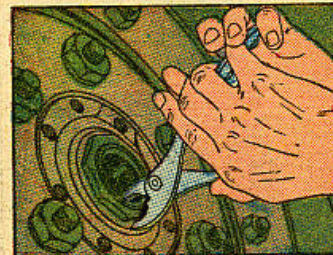
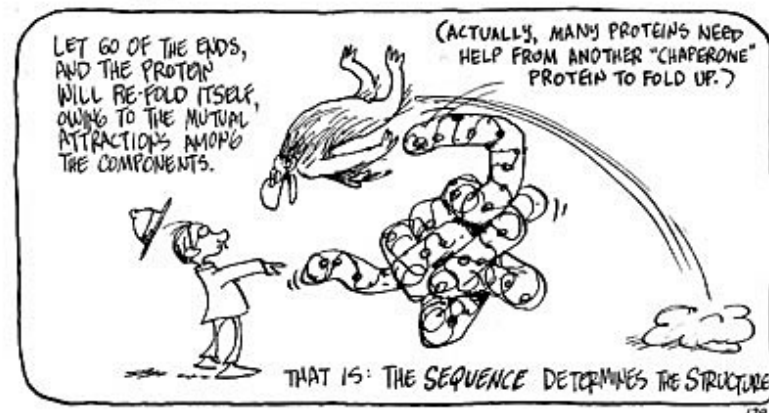
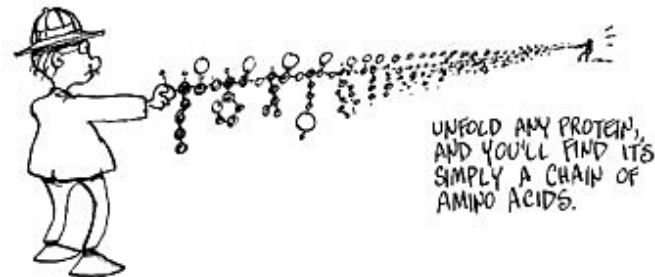
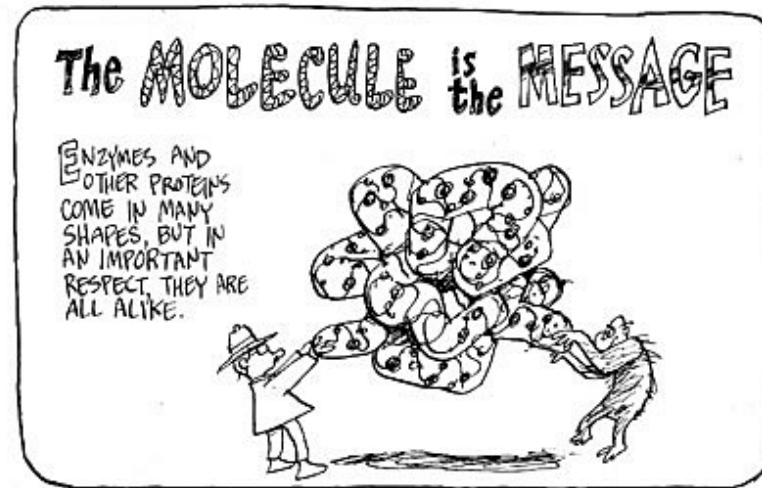
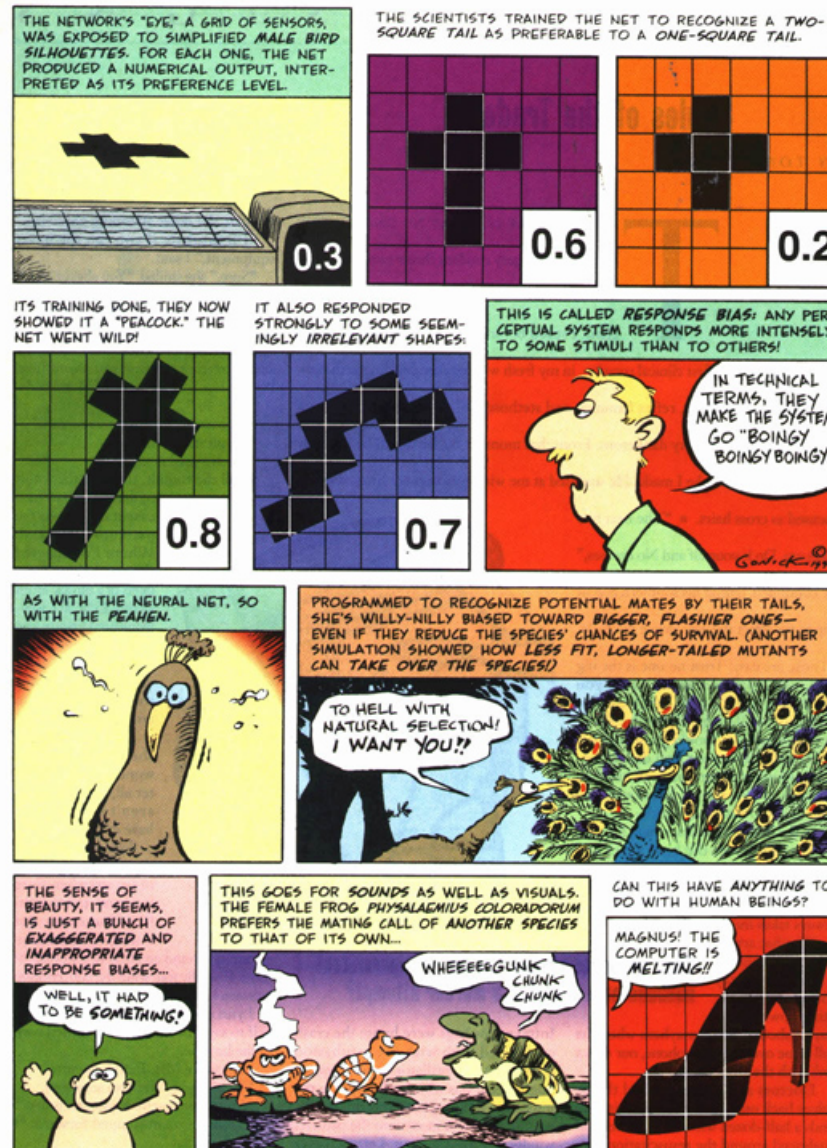


Fig. 13—Instead of the mayhem at the left you squeeze that washer-lock gentle 'n easy like you'd want to do if it was a firing pin.

Preventive Maintenance Monthly.
Will Eisner American Visuals Corporation 1951



Cartoon Guide to Genetics. Larry Gonick 1983

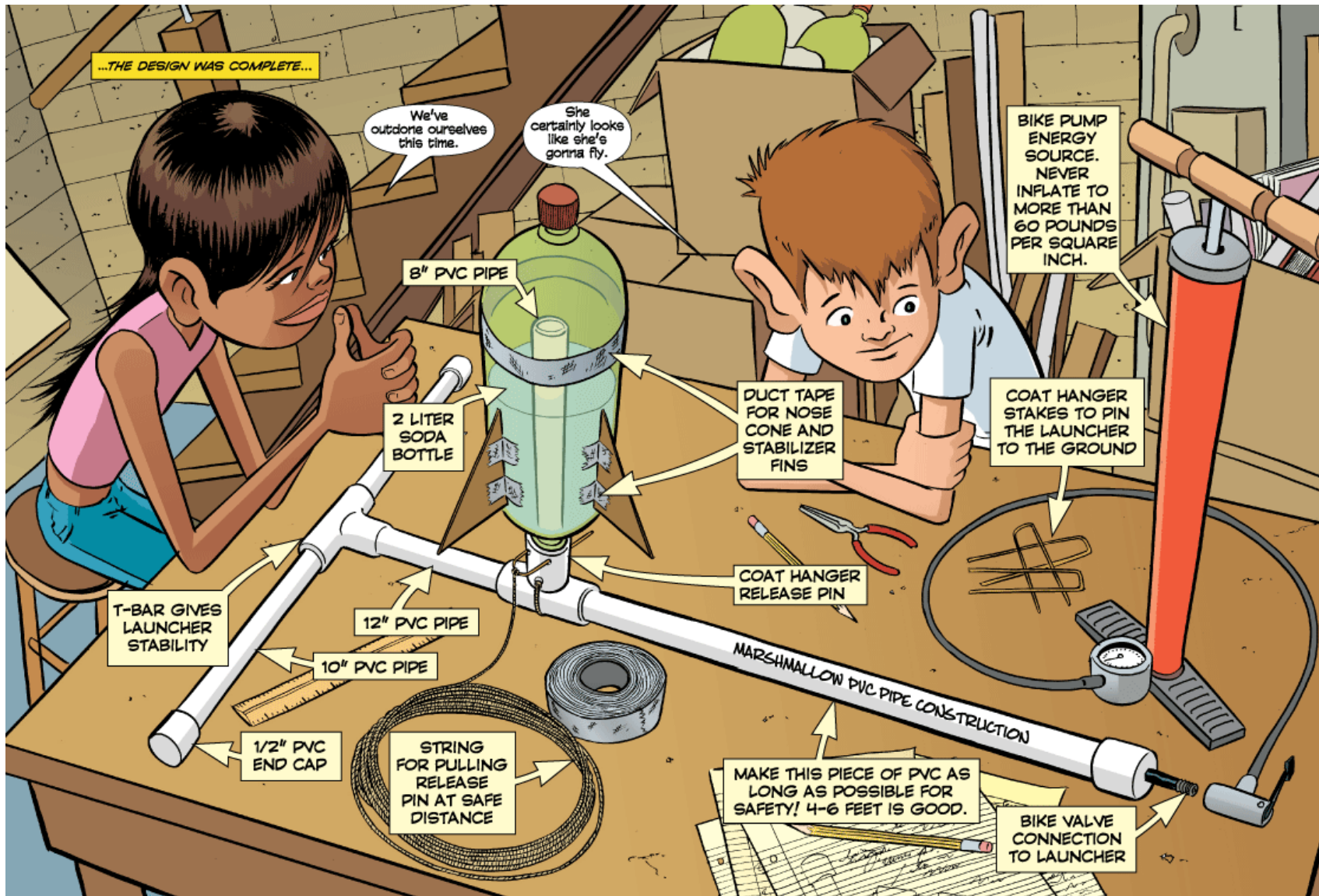


Beauty and the Beast (Neural Nets)

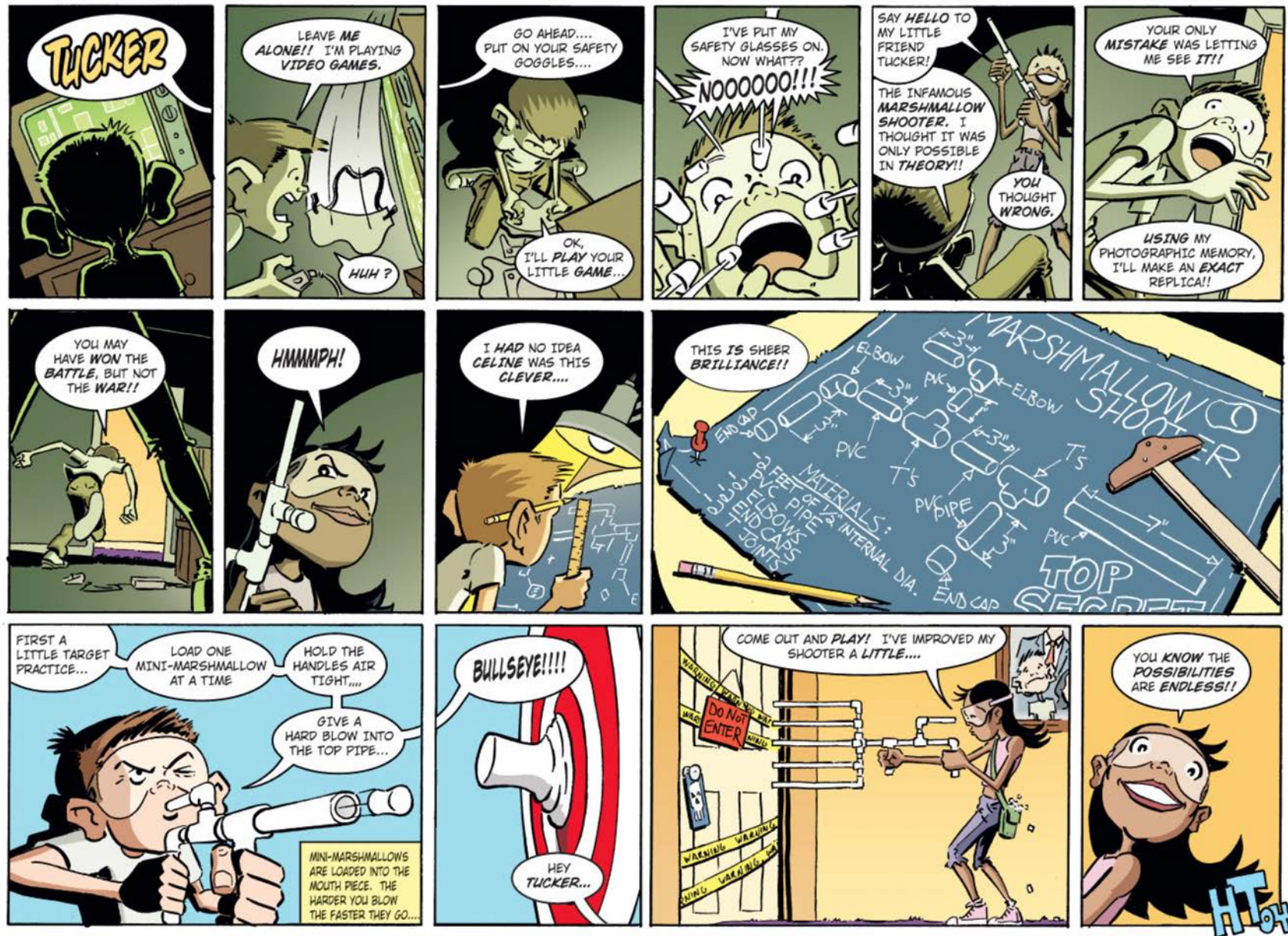
Larry Gonick Discover Magazine 1990's



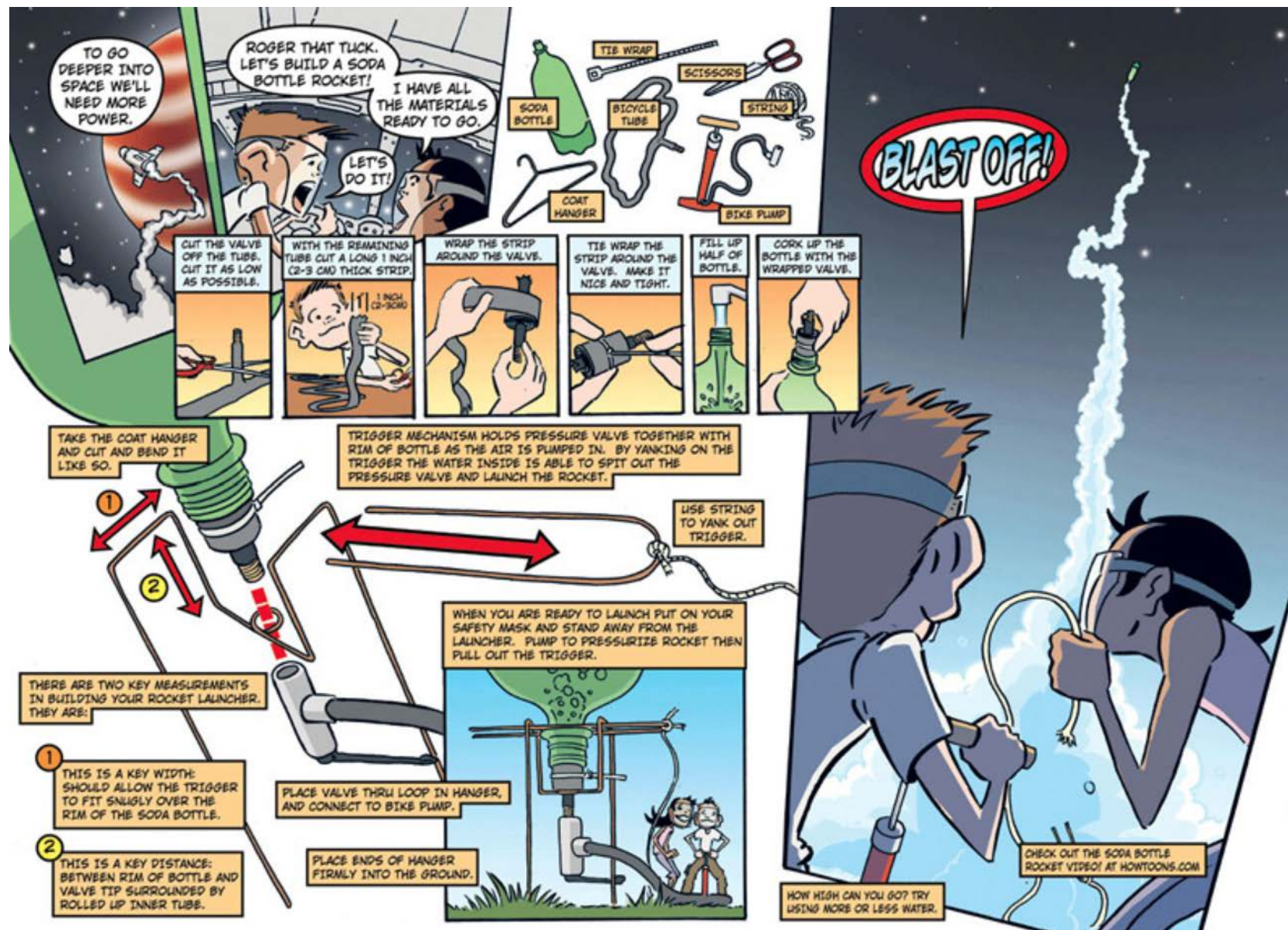
Radio: An Illustrated Guide.
Jessica Abel and Ira Glass 1999



Howtoons. Saul Griffith, Nick Dragotta, Ingrid Dragotta and Joost Bonsen 2004



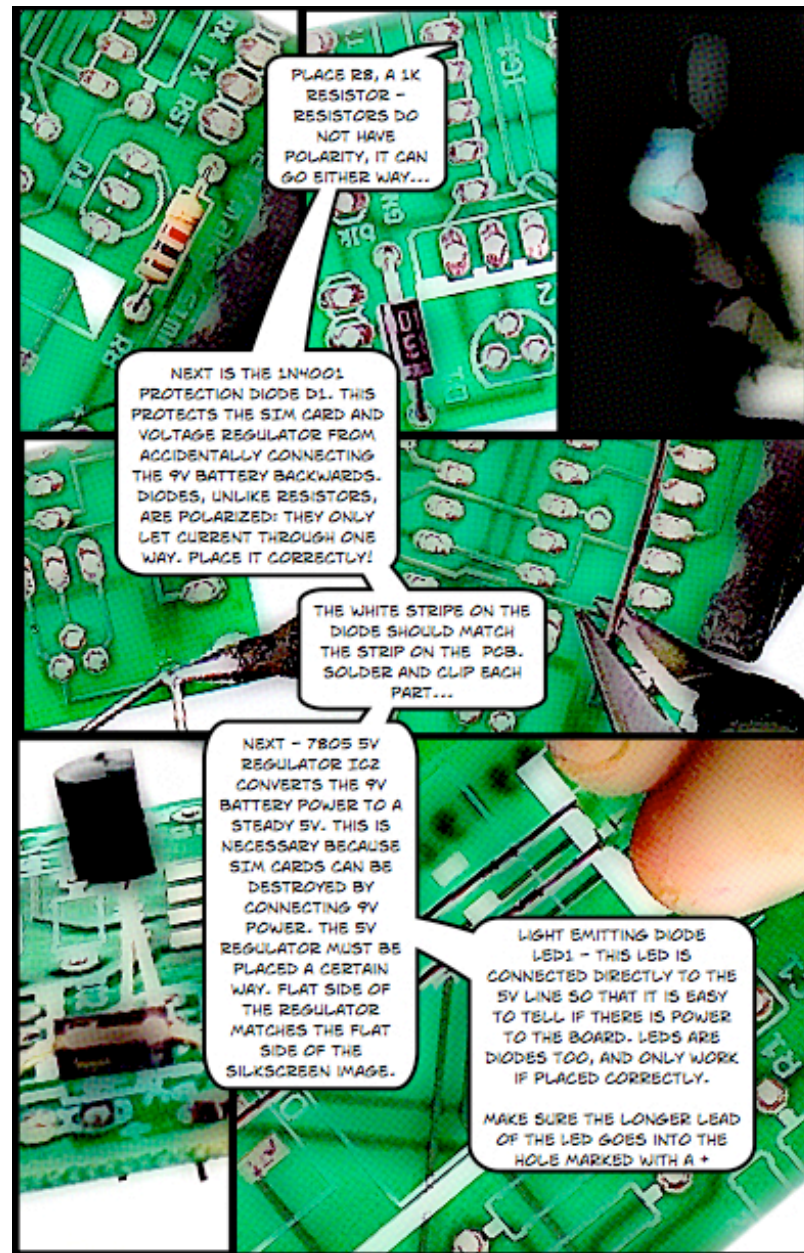
Howtoons. Saul Griffith, Nick Dragotta, Ingrid Dragotta and Joost Bonsen



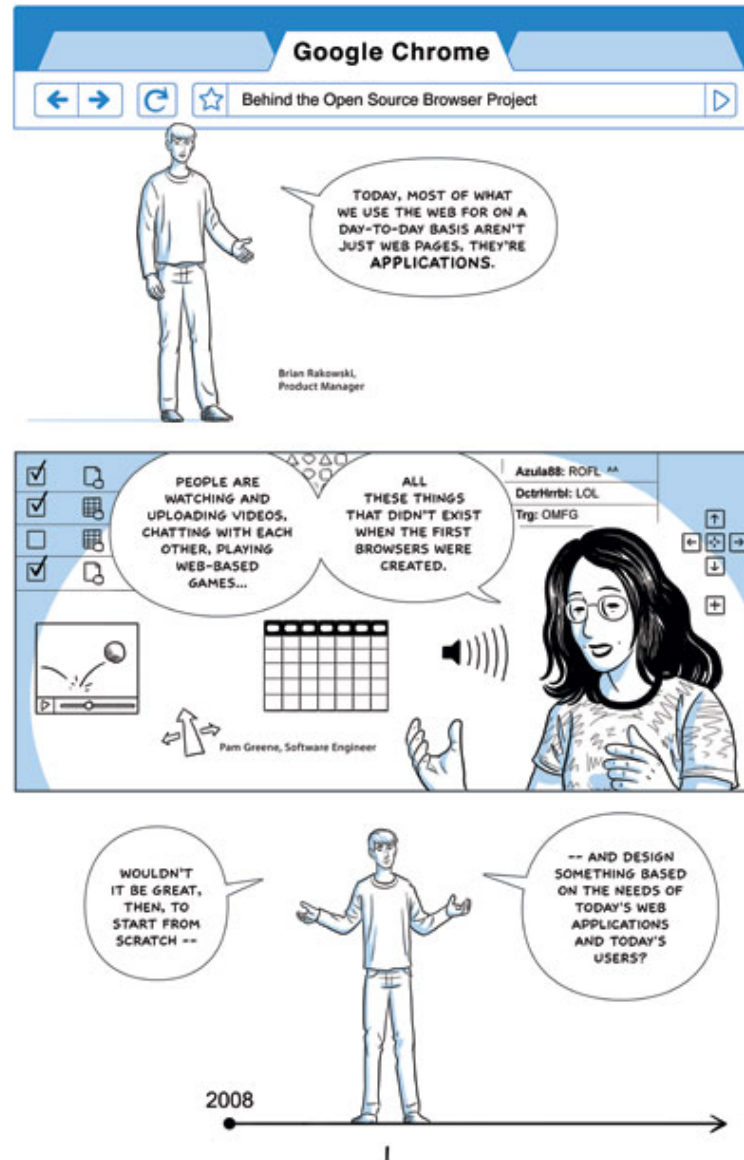
Howtoons. Saul Griffith, Nick Dragotta, Ingrid Dragotta and Joost Bonsen



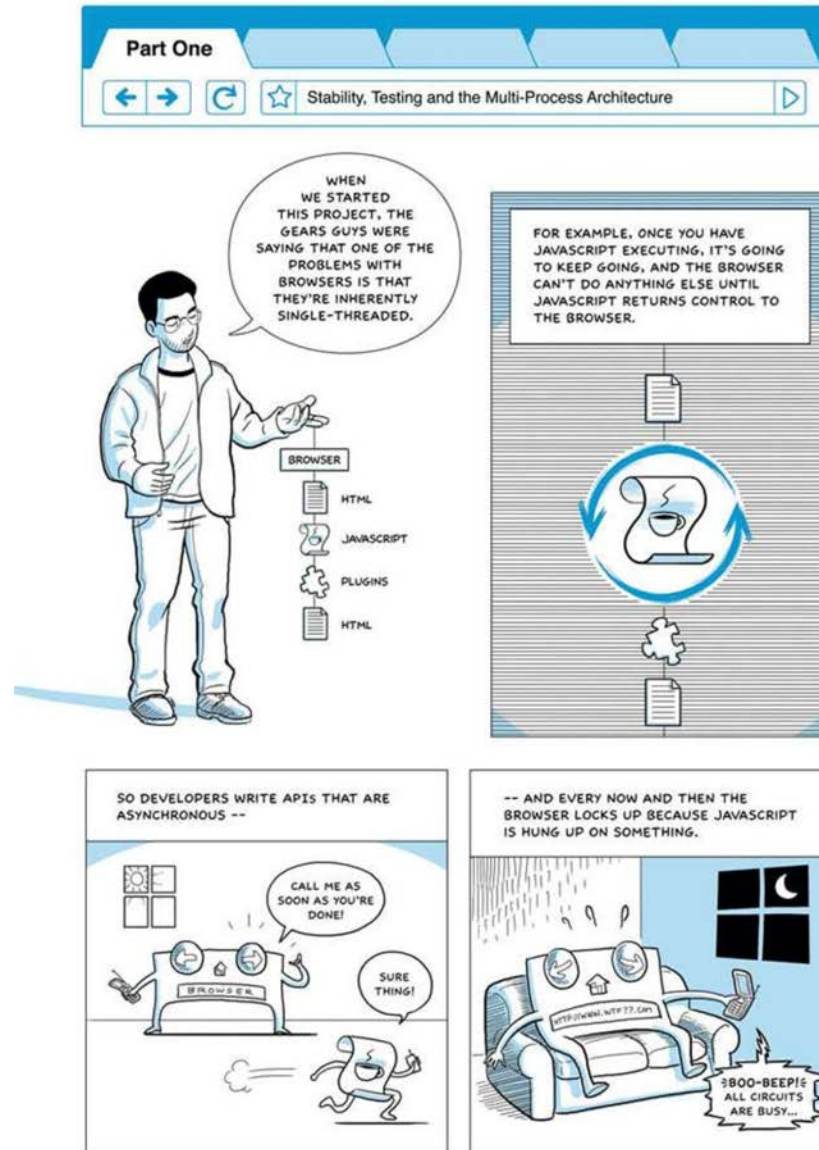
Citizen Engineer. Limor Fried & Phillip Torrone. 2008

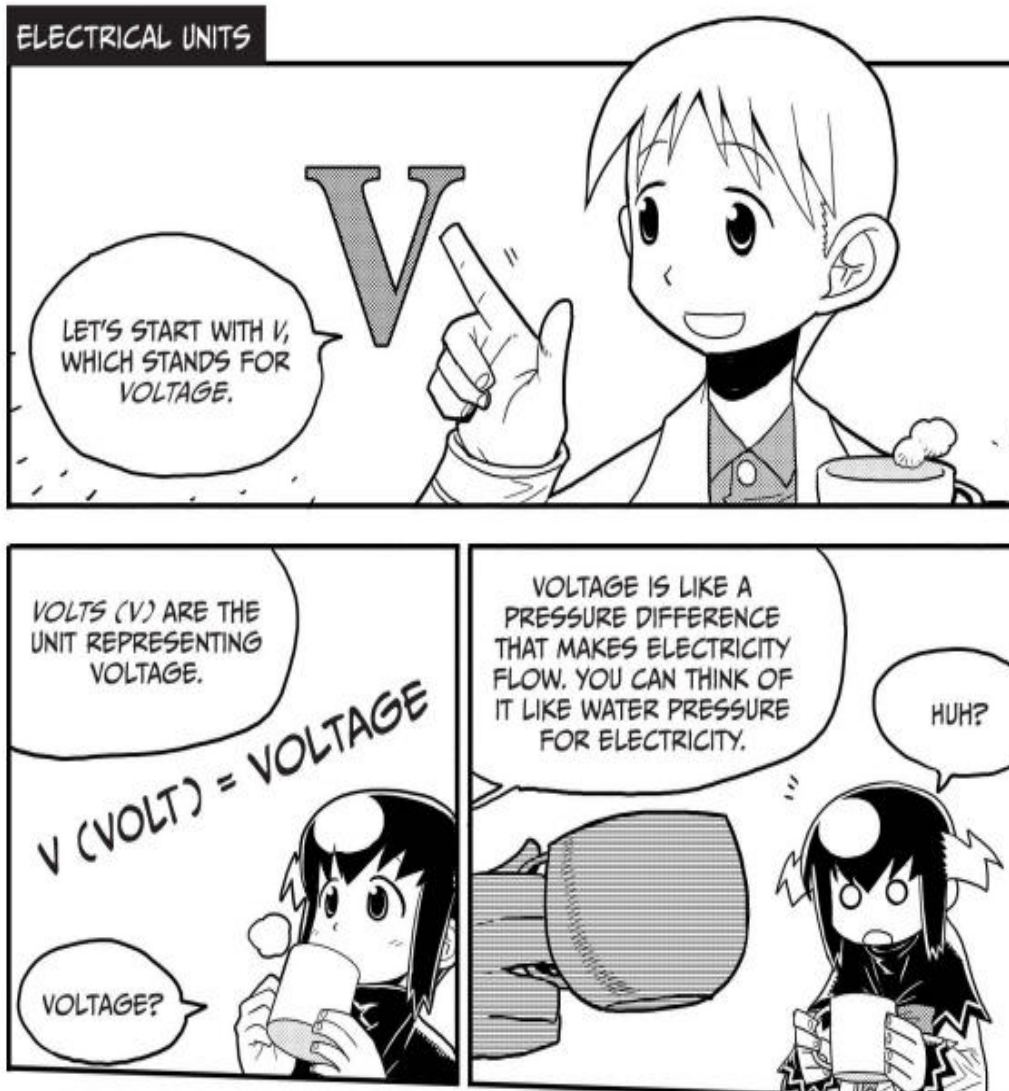


Citizen Engineer. Limor Fried & Phillip Torrone 2008



Google Chrome. Scott McCloud 2008

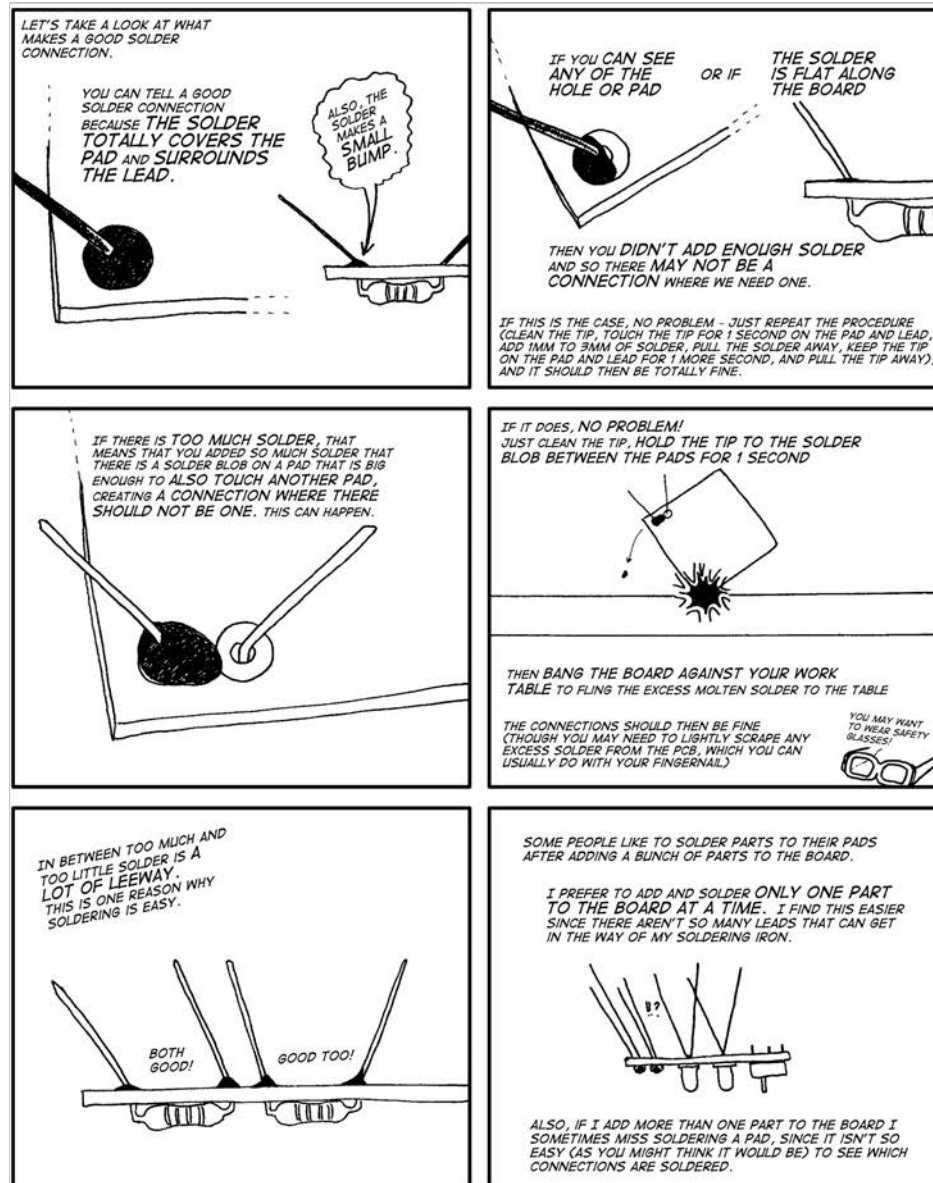




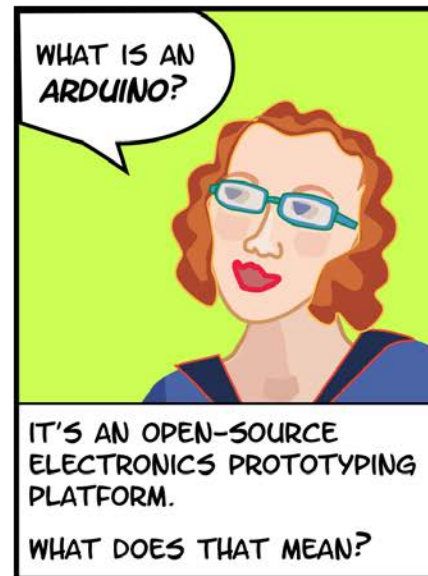
Manga Guide to Electricity
Kazuhiro Fujitaki, Matsuda, and Trend-pro Co, Ltd
No Starch Press 2009



Soldering is Easy. Mitch Altman, Andie Nordgren, Jeff Keyzer 2011

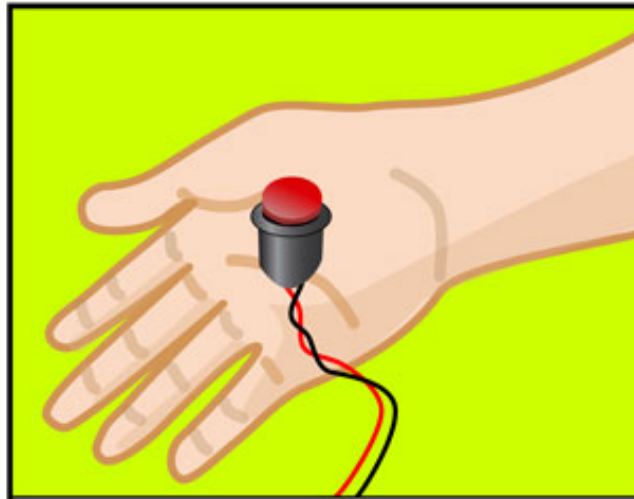


Soldering is Easy. Mitch Altman, Andie Nordgren, Jeff Keyzer 2011

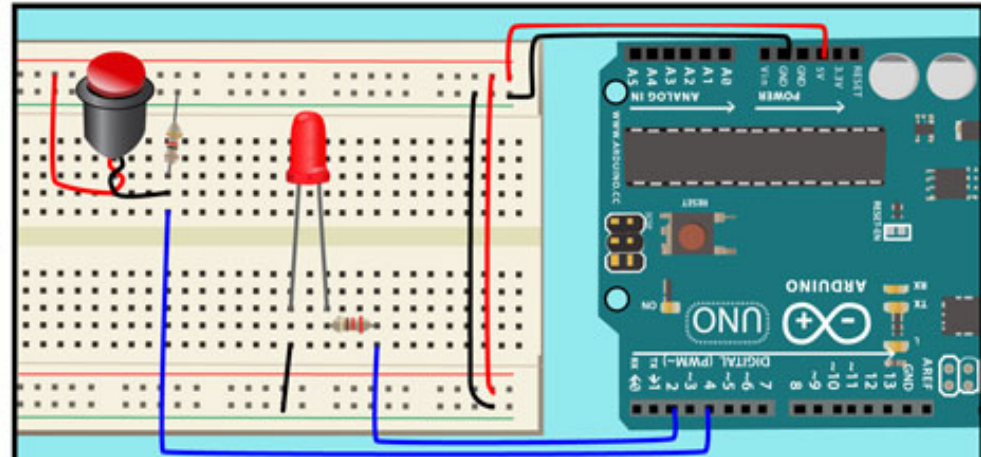


- OPEN SOURCE-** "RESOURCES THAT CAN BE USED, REDISTRIBUTED OR REWRITTEN FREE OF CHARGE. OFTEN SOFTWARE OR HARDWARE."
- ELECTRONICS-** "TECHNOLOGY WHICH MAKES USE OF THE CONTROLLED MOTION OF ELECTRONS THROUGH DIFFERENT MEDIA."
- PROTOTYPE-** "AN ORIGINAL FORM THAT CAN SERVE AS A BASIS OR STANDARD FOR OTHER THINGS."
- PLATFORM-** "HARDWARE ARCHITECTURE WITH SOFTWARE FRAMEWORK ON WHICH OTHER SOFTWARE CAN RUN."

Introduction to Arduino. Jody Culkin 2011



NEXT WE WILL ADD A SWITCH, A DIGITAL INPUT, SO WE CAN TURN THE LED OFF AND ON.

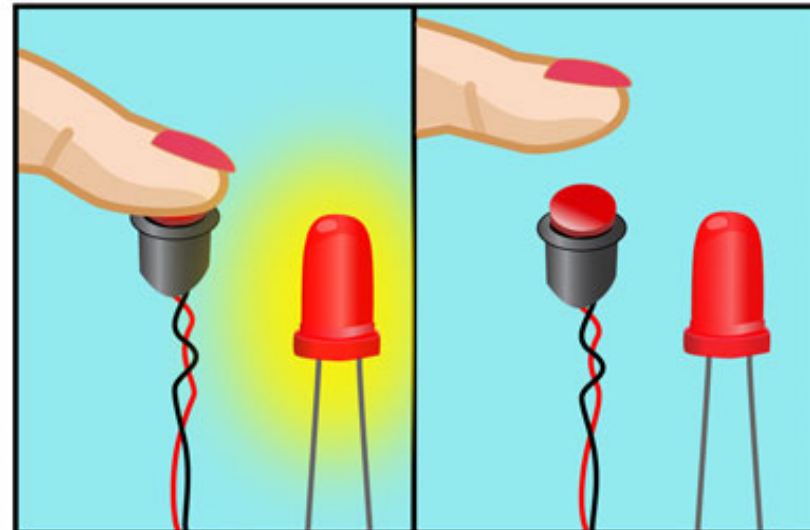


CONNECT ONE END OF A MOMENTARY SWITCH TO PIN 4 ON THE ARDUINO, WITH A 10K RESISTOR CONNECTED TO GROUND ATTACHED TO THE SAME END. ATTACH THE OTHER END TO POWER. WE WILL LEAVE THE LED ATTACHED TO THE SAME PIN.

```
void setup() {
  pinMode(2, OUTPUT);
  pinMode(4, INPUT);
}

void loop() {
  if(digitalRead(4)){
    digitalWrite(2, HIGH);
  }else{
    digitalWrite(2, LOW);
  }
}
```

NEXT WE'LL WRITE THE CODE. IN SETUP, WE DECLARE PIN 2 AN OUTPUT AND PIN 4 AN INPUT. IN LOOP, WE USE AN IF STATEMENT, IF WE READ PIN 4 AS HIGH, WE SET THE LED PIN TO HIGH, OTHERWISE WE SET THE LED PIN TO LOW, TURNING IT OFF.

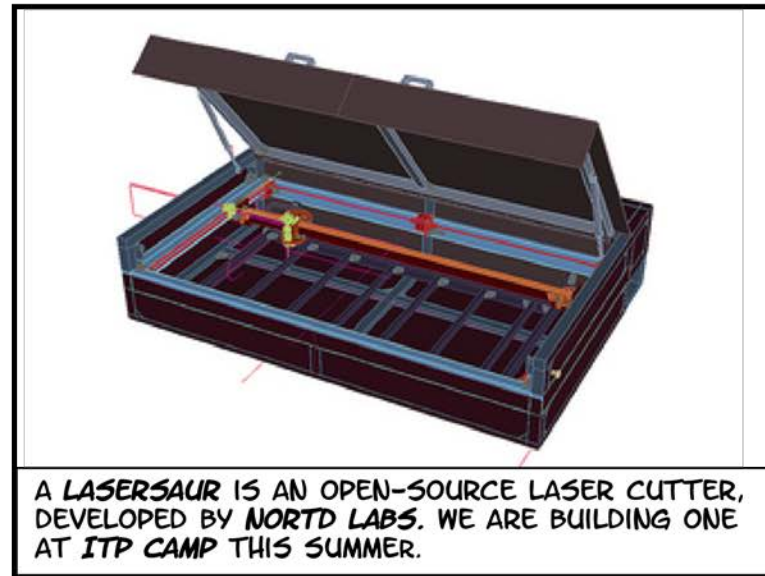


THE LED LIGHTS WHEN THE SWITCH IS HELD DOWN.

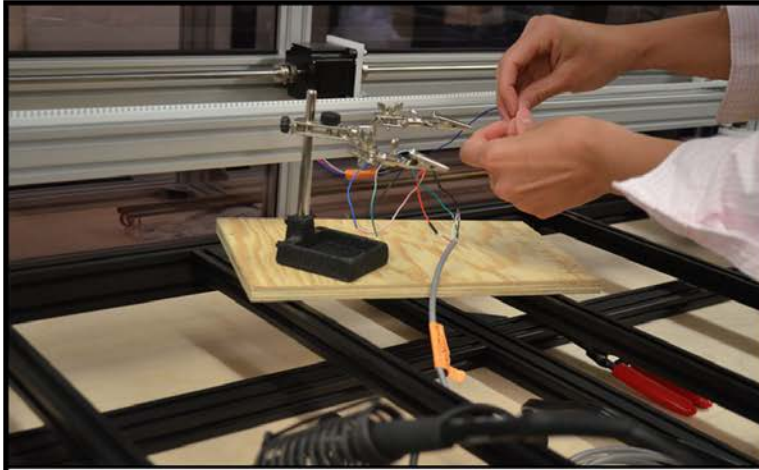
Introduction to Arduino. Jody Culkin 2011



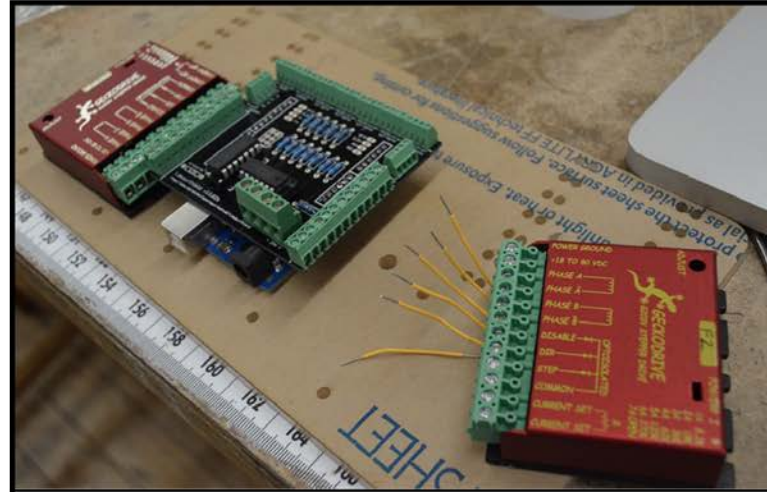
E Is For Electronics. Lady Ada, Robert Ullman, David Stadler and John De Cristofaro 2012



Lasersaur Documentation. Jody Culkin 2013



MICHELL SOLDERED THE STEPPER MOTORS, AFTER WE CHECKED THE WIRING DIAGRAMS ONLINE AND ASKED STEFAN ABOUT SOME DISCREPANCIES.



WE STARTED WIRING UP THE GECKO STEPPER DRIVERS AND ATTACHING THEM TO THE SHIELD.



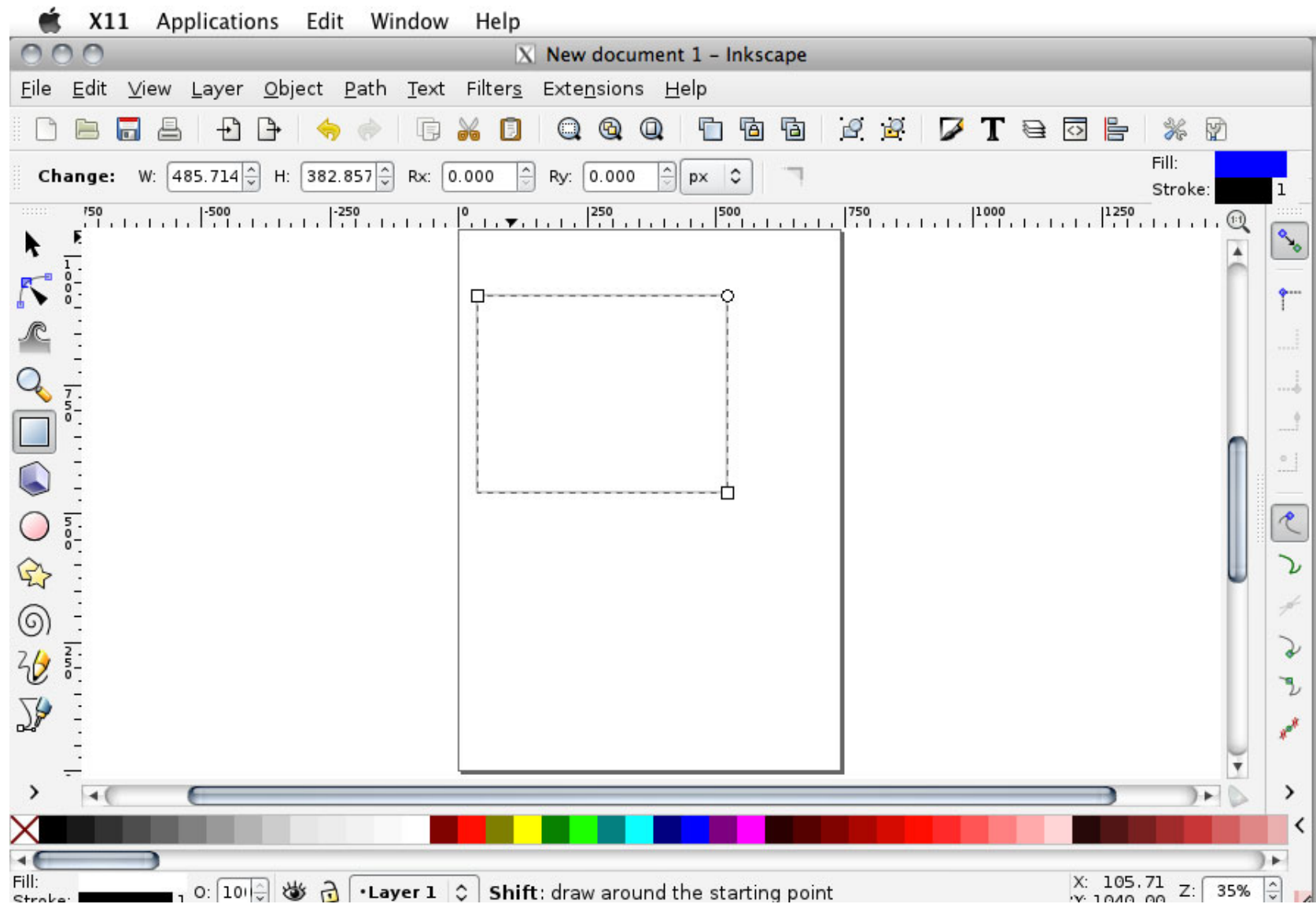
CAMP IS OVER, ERIC AND I ARE STILL WORKING.

ERIC TIGHTENED DOWN THE SCREW TERMINALS.

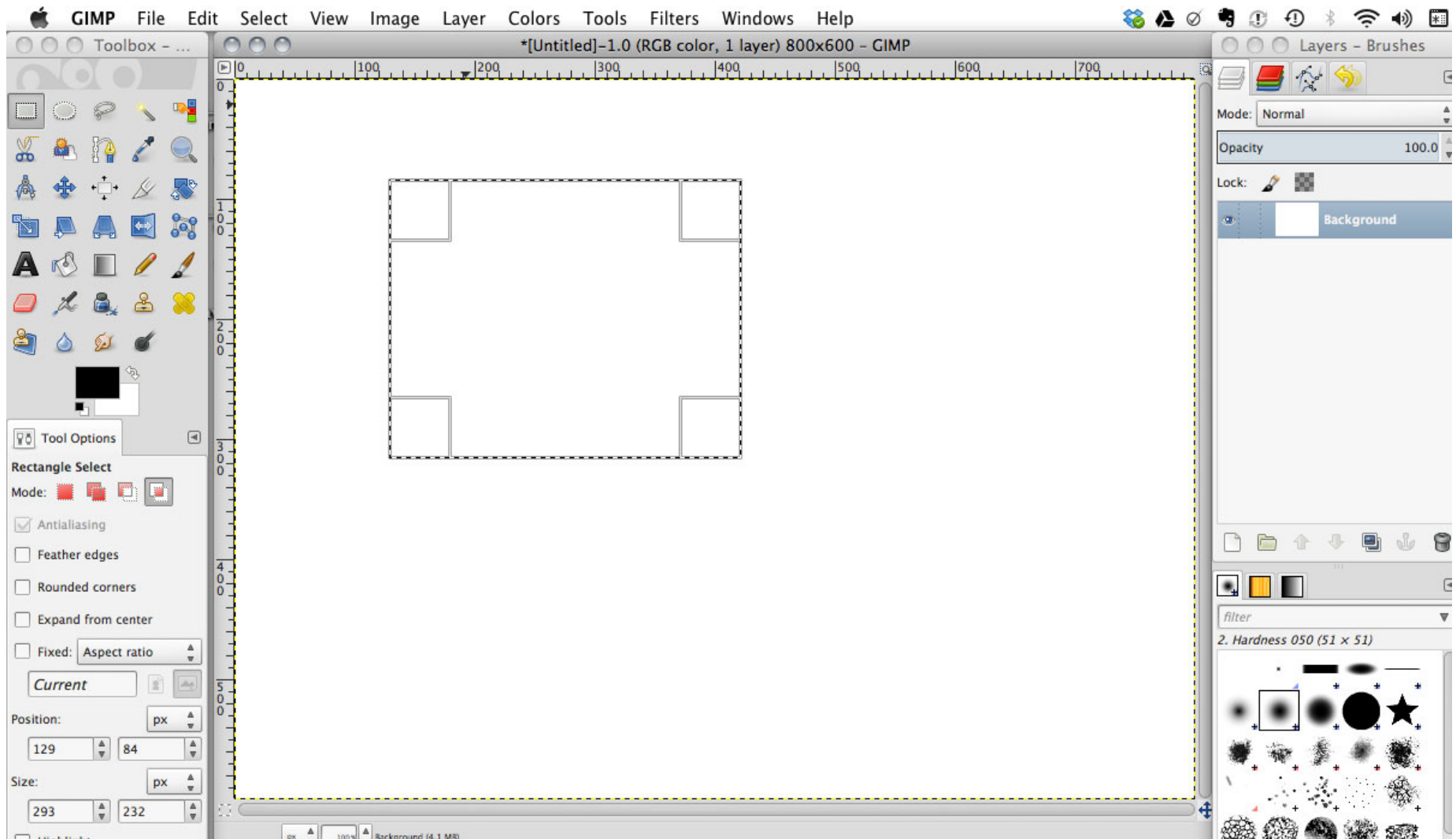


WE STARTED ATTACHING THE POWER SUPPLY, RELAY & TERMINAL BLOCKS TO THE DIN RAIL, AS WELL AS THE BOARD WITH THE SHIELD, ARDUINO AND DRIVERS. WE ATTACHED THE RAIL TO THE FRAME OF THE LASERSAUR, AND STARTED TO WIRE THE COMPONENTS.

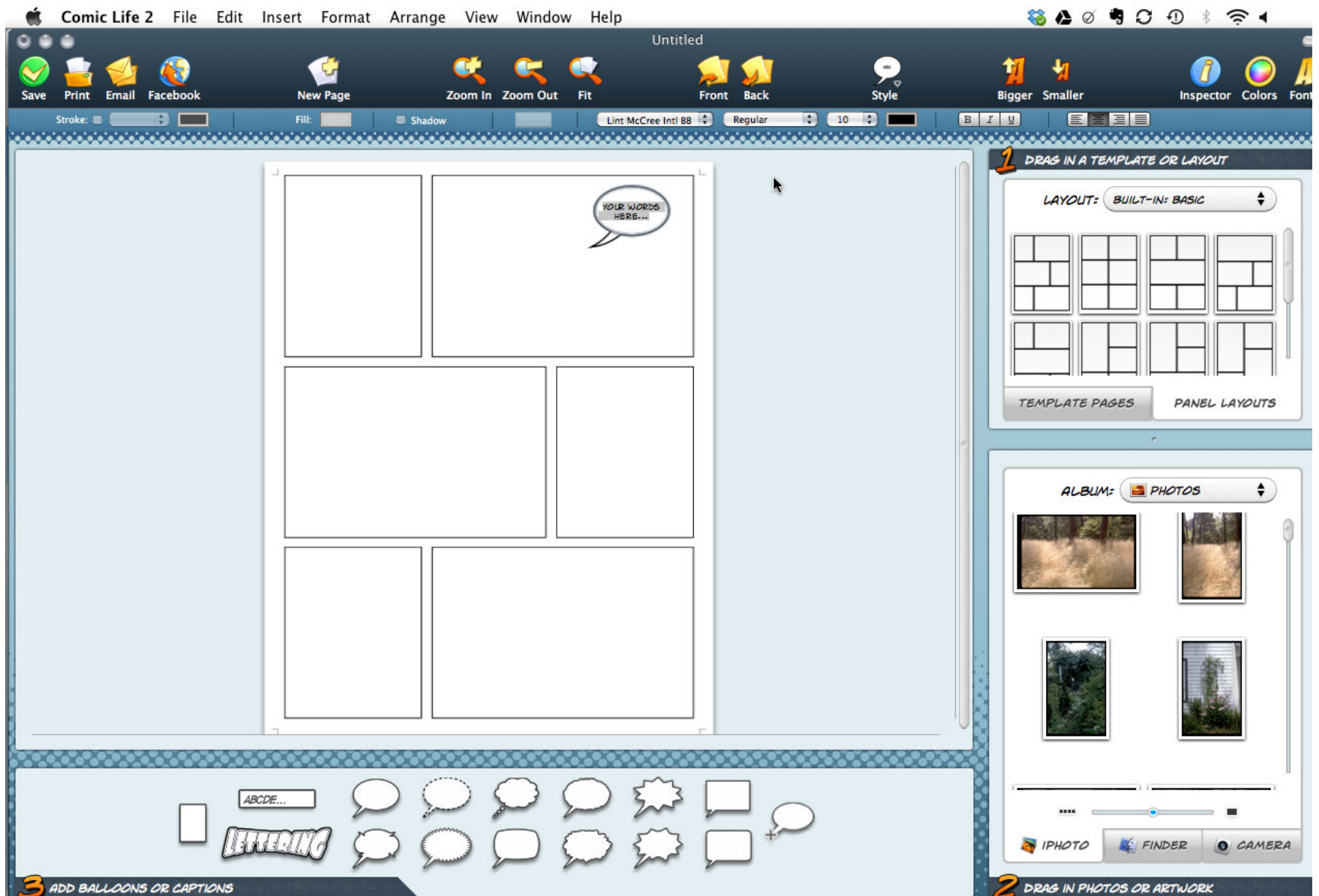
Lasersaur Documentation. Jody Culkin 2013



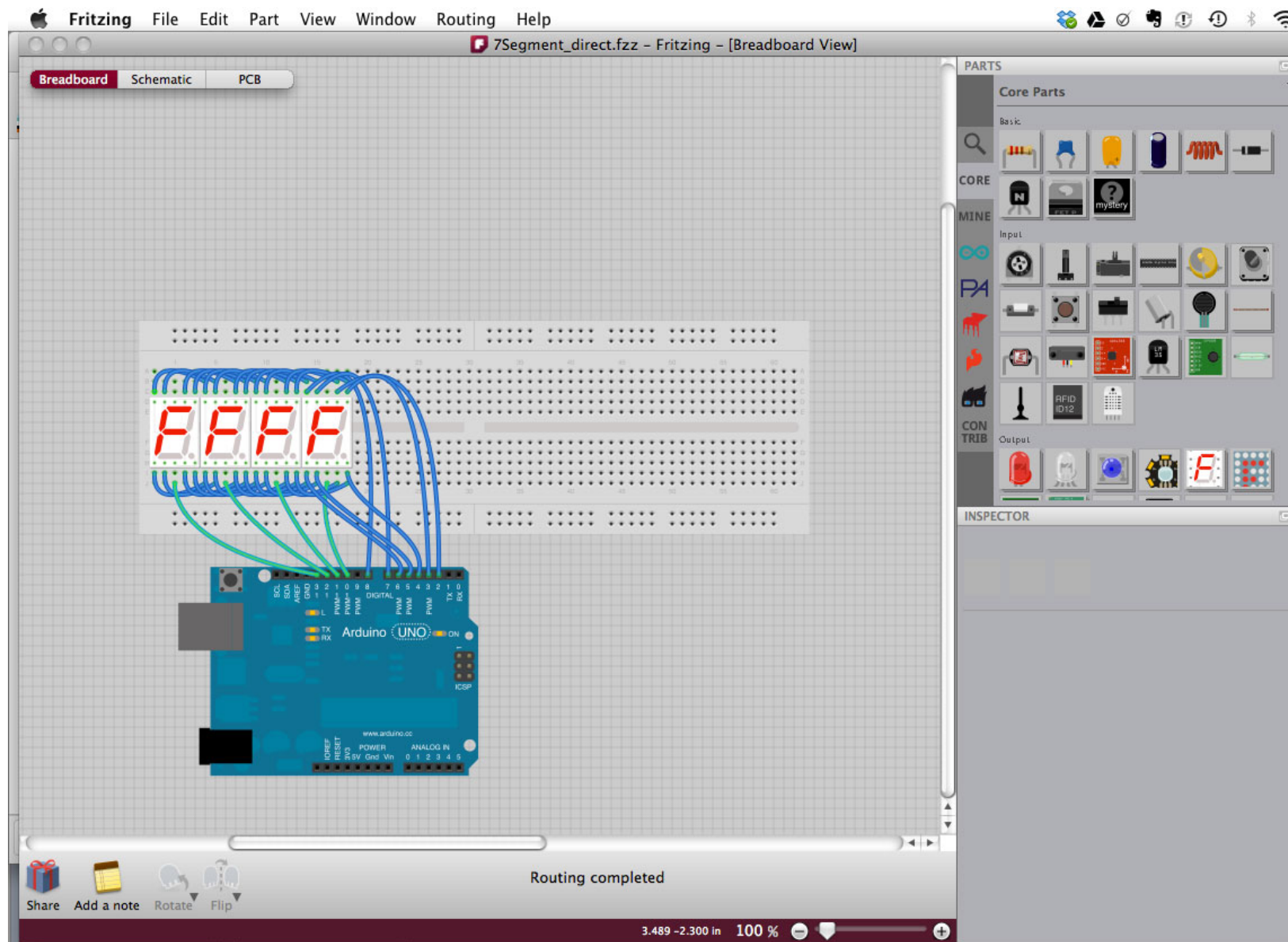
Inkscape
<http://inkscape.org/>



GIMP (GNU Image Manipulation Program)
<http://www.gimp.org/>



Comic Life
<http://comiclfe.com/>



Fritzing
<http://fritzing.org/>

Comics Links

Will Eisner PS Preventive Maintenance Magazine at VCU Libraries
<http://dig.library.vcu.edu/cdm/landingpage/collection/psm>

Larry Gonick Mathematical Cartoons at MSRI
<http://www.msri.org/ext/larryg/index.htm>

Howtoons
<http://www.howtoons.com/>

Citizen Engineer
<http://www.citizenengineer.com/>

Google Chrome Comic
<http://www.google.com/googlebooks/chrome/index.html>

Soldering is Easy!
http://mightyohm.com/files/soldercomic/FullSolderComic_EN.pdf

Arduino!
<http://www.jodyculkin.com/comics-2/introduction-to-arduino>

E is for Electronics
<http://www.adafruit.com/coloringbook>

Software Links

Inkscape

<http://inkscape.org/>

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Comic Life

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Fritzing

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