Please check that you have all the parts as shown above. The Capacitor may be blue instead of brown, that's OK.
Step 1: Install Resistors

Bend leads and insert the resistors at R1, R2

Solder them on the back like this. The solder joints should be nice and shiny.

Snip off the wires on the back like this.
Step 2: Install Socket at U1

Insert the socket in the board. Make sure the notch on the end is down, as shown.

Bend over two of the leads so it doesn't fall out.

Solder all the leads.

Step 3: Install LEDs

Insert the LEDs at D1 through D8.

Make sure they are the right way around!

The flat side goes towards the edge of the board. The longer wire goes in the hole away from the edge of the board.

Bend the leads so they don't fall out.

Solder them in and clip the leads off.
**Step 4: Install Push Button**
Install the push button at SW1.
You may have to push a bit to get it to snap in.
Solder the 4 legs on the back

**Step 5: Install Capacitor**
Install the capacitor at C1.
Solder the leads on the back and clip them
Step 6: Install Light Sensors

The light sensors look like LEDs, but clear and smaller.

Bend them as shown, noting that one lead is longer.

Install them at D9 and D10.

*Make sure they go in the right way around!*

Solder them on the back and clip the leads
Step 7: Connect the Battery Pack

First, thread the wires down through the hole by the edge of the board as shown. The red wire goes in the hole to the left.

And solder on the back.

Then thread the wires up through the middle holes.

Finally down through the smaller holes.

Pull the wires tight like this.
Step 8: Install Microcontroller

Use your finger to press the microcontroller down on a hard surface to bend the leads so they point straight out like this:

Put it in the socket.

*Make sure it is the right way around!*

The end with the notch goes next to the capacitor (C1) where there is a notch drawn in white on the board.

Press it in firmly, making sure all the leads go in the socket.

You're Done! Congratulations!

Have someone check over your work, and then install two batteries and turn it on.

The LEDs should start to blink, and if you wave your kit back and forth you should see a message in the air.

You can program a new message by going to the website:

[http://edf.bu.edu/BlinkyPovAVR/programming](http://edf.bu.edu/BlinkyPovAVR/programming)