**POV Ruler Instructions:**

1. Never soldered before? Do a quick YouTube search for: Collin’s Lab Soldering.
2. When soldering, solder 1 pin, then check on the top of the board for alignment before completing the rest of the pins for that part.
3. Orient your computer board with the side marked “I learned to solder!” facing up. The ruler is on the back of the board.
4. If you have 8, 220 ohm resistors, mount them in the resistor bank at the bottom right of the board
5. If you have a resistor pack (16 pin DIP), pin 1 goes to the white triangle (bottom left)
6. Solder the 14 pin chip socket next to the resistors. It is labeled ATTINY24/44. Remember your 1 pin alignment trick (See #2)
7. Solder the R1 resistor (the part with the brown, black, and orange stripes). This part is optional.
8. Solder the small yellow capacitor in C1. This part is optional.
9. Solder the 2 switches for ENTER and NEXT.
10. Solder the 8 LEDs in locations D1-D8. Remember the longer lead is positive and should go into the hole marked with a plus sign (+).
11. If you have the 6 pin ISP programmer, solder this in the ISP location keeping in mind pin 1 is bottom left and is marked by a white triangle. This part is optional.
12. Solder the battery socket on the far left, noting the square notch to the right.
13. Insert the Atmel TINY-44A computer chip into the socket, noting the dot and mark on the board face up.
14. Insert battery with the **+** up, turn on by pressing both buttons. ☺
15. See the POV Programming Handout for instructions on how to program your POV.