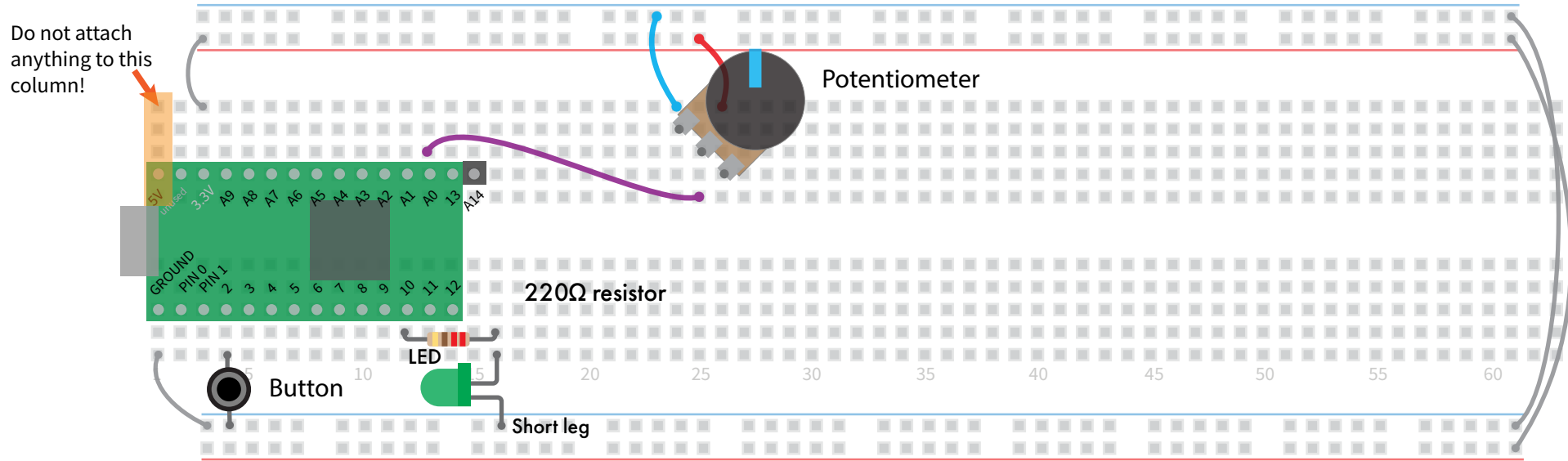


Setup 2

Analog and digital, in and out

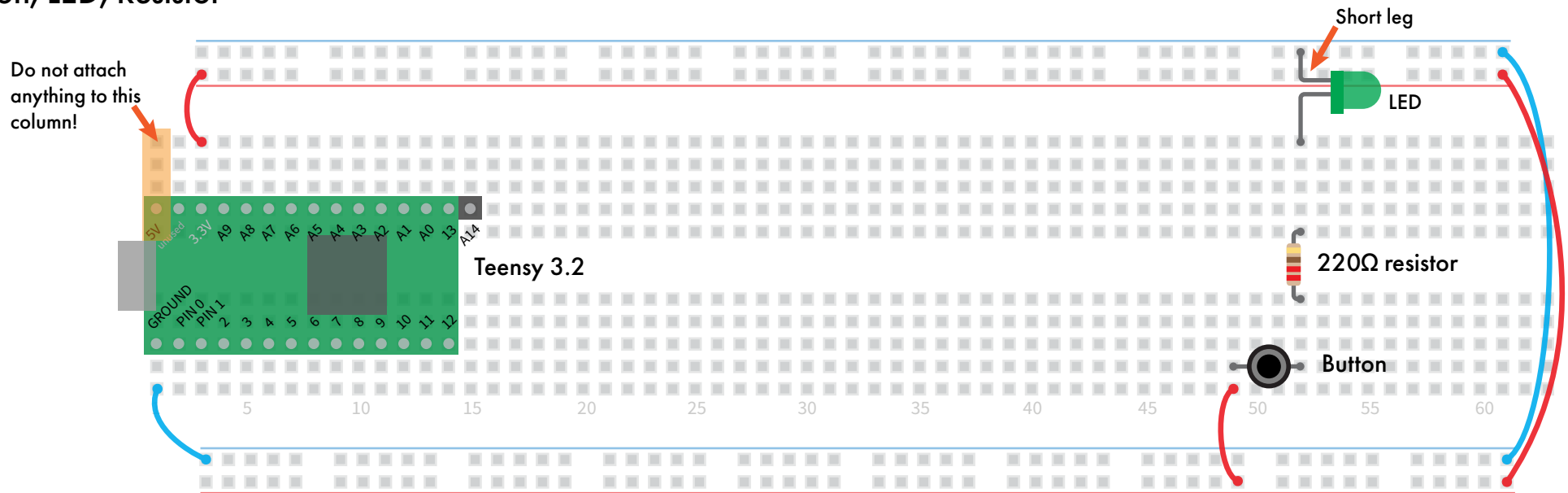


Grey jumpers are already installed.

The top left pin of the pot connected to the blue line. The Middle goes to pin A0 of the Teensy. The bottom right connects to red.

Setup 1

Button, LED, Resistor



Here we're just using the Teensy to deliver power to the breadboard.

USB supplies 5 Volts but the Teensys can only handle 3.3V so that's what we'll be using.

Use any sized jumper wires that work for you.

The colors just here indicate what they are connected to. 3.3V for the red bus line, ground for the blue bus line

The button can go in either direction.

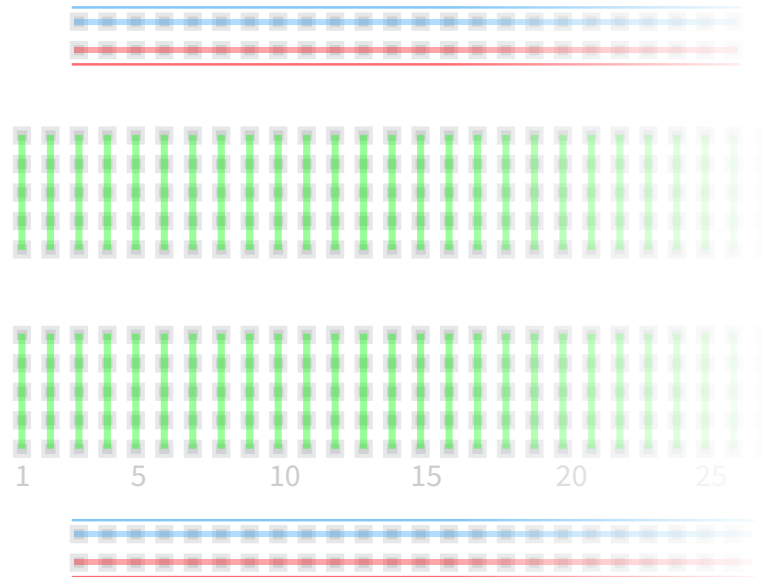
There are two resistors in your kit. Use the smaller one.

The LED has a long and short leg and needs to be installed with the shorter one in the blue line at the top



Resistor values are indicated with the colored lines, not their size. The smaller one can handle less wattage than the larger one but we don't need to worry about that here.

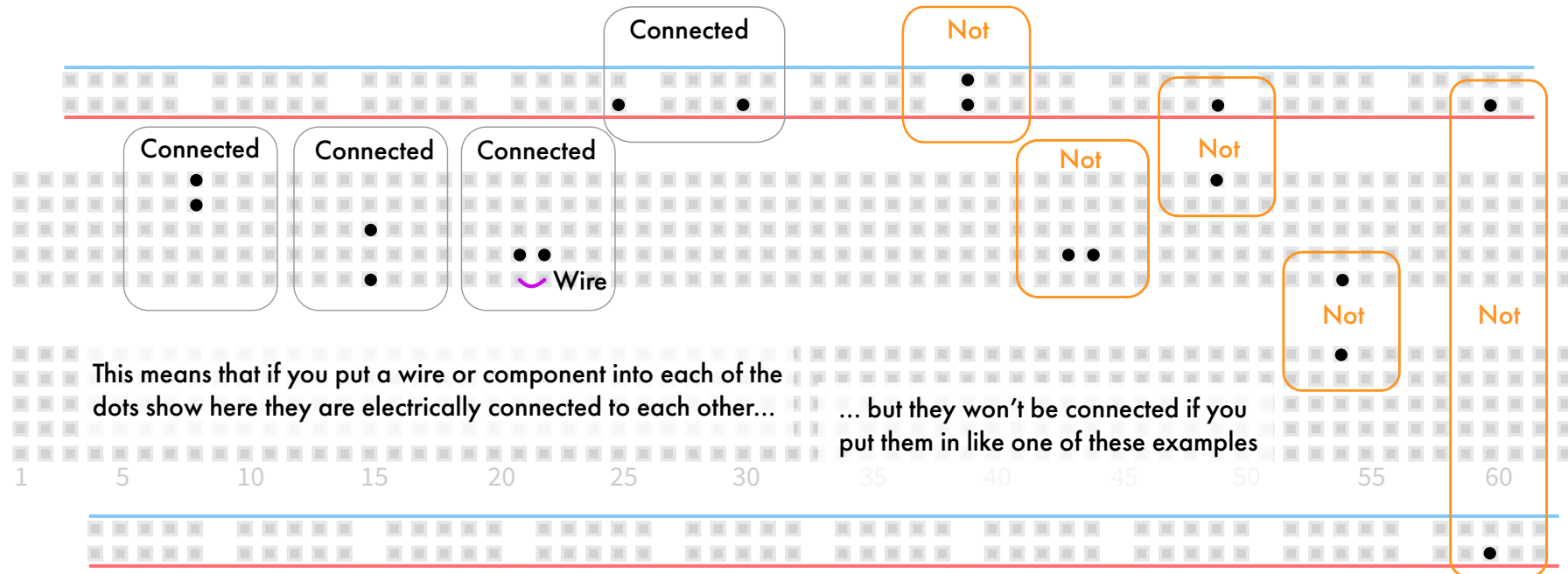
Resistors limit the flow of electricity. Without it the LED would get too much and burn out quickly.



Breadboards make it easy to assemble electronic circuits without soldering

The holes on a breadboard are connected as show with the colored lines.

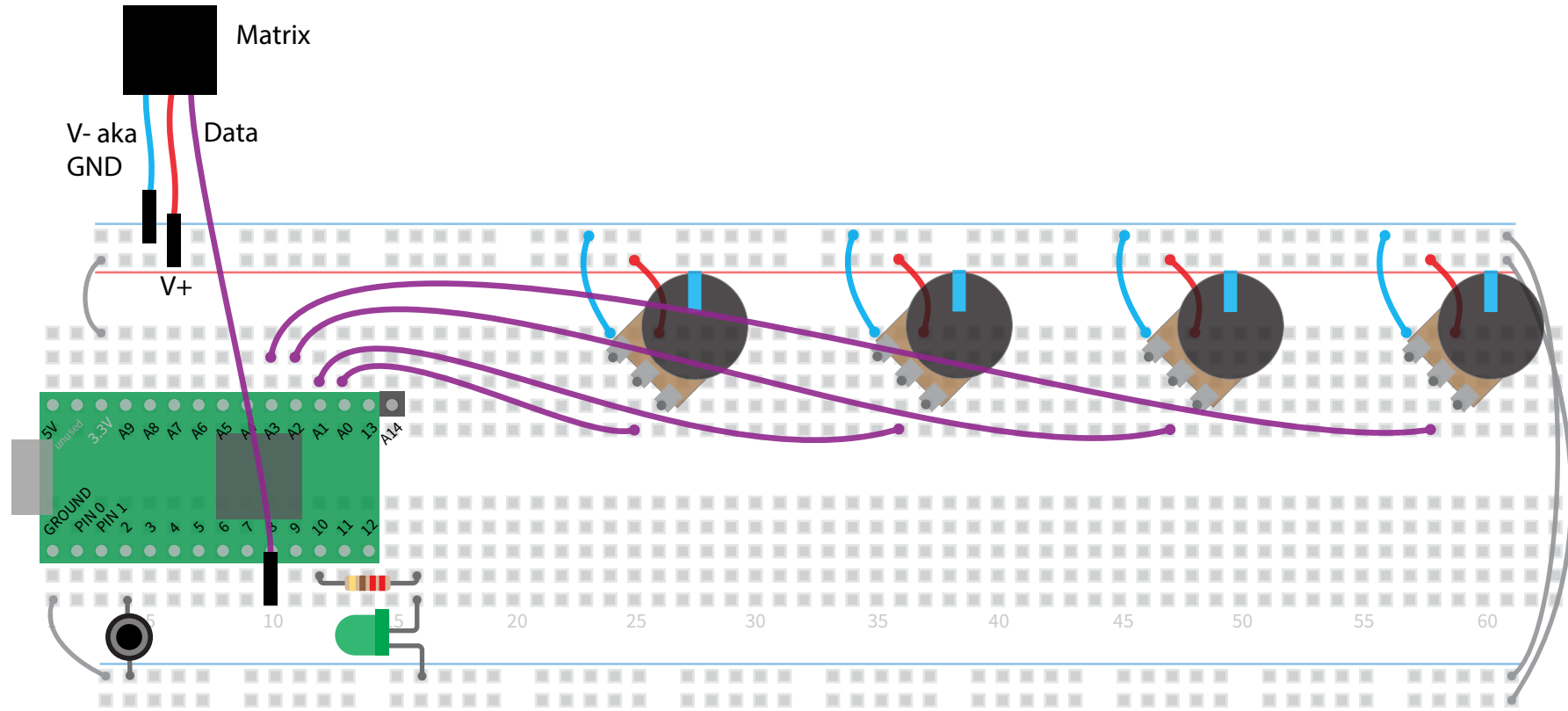
The vertical strips on either side of the central gap are connected in groups of five.
The horizontal red and blue "bus" lines are connected all the way across the board.



This means that if you put a wire or component into each of the dots show here they are electrically connected to each other...

... but they won't be connected if you put them in like one of these examples

Setup 3 LED matrix



Use the long jumpers with black plastic ends to connect the LED matrix to the breadboard.

The socket side connects to the matrix while the pins go in the breadboard.

There are several types of panels with slightly different markings.

Data should go to "Data in" of "LED in"

Ground is V- or GND

Power is V+ or 5V (don't actually connect it to 5V, it goes to the 3.3V line like everything else)

Don't worry if you have it hooked up incorrectly, it won't blow up.