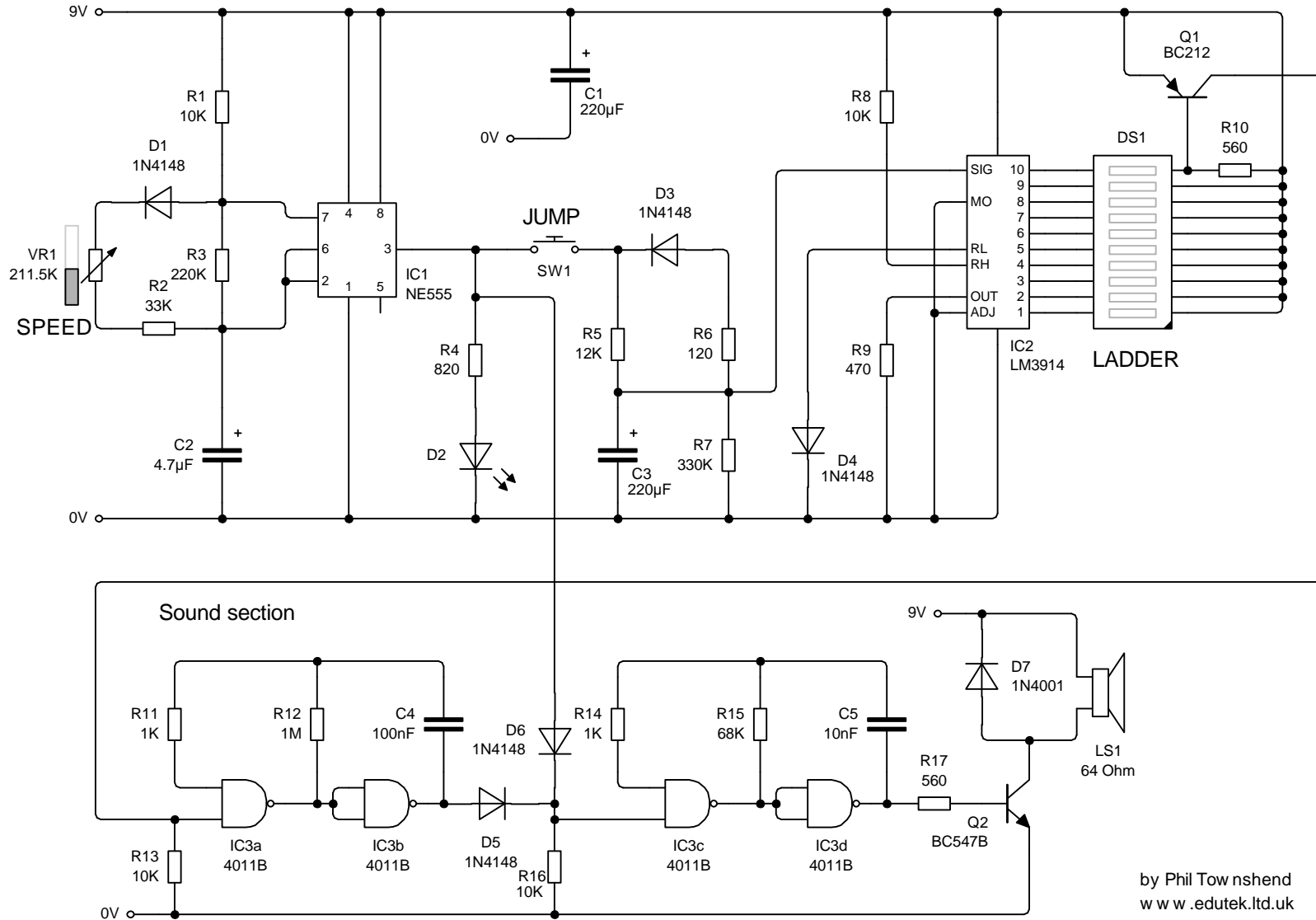


SURVIVAL GAME

Press the jump button only when the LED is lit. Otherwise you drop down the ladder.
 Basically a circuit that charges a capacitor when the button is pressed and the 555 output on, then measures the voltage using a LED bar graph display. The capacitor discharges rapidly through the 120 ohm resistor when the button is pressed and the output is low from the 555.



by Phil Tow nshend
 www.edutek.ltd.uk

PARTS LIST

| Name | Quantity |
|--------------------------------|----------|
| 100nF Capacitor | 1 |
| 10K Resistor (1/4W) | 4 |
| 10nF Capacitor | 1 |
| 120 Resistor (1/4W) | 1 |
| 12K Resistor (1/4W) | 1 |
| 1K Resistor (1/4W) | 2 |
| 1M Resistor (1/4W) | 1 |
| 1N4001 Diode | 1 |
| 1N4148 Diode | 5 |
| 220µF Electrolytic Capacitor | 2 |
| 220K Resistor (1/4W) | 1 |
| 330K Resistor (1/4W) | 1 |
| 33K Resistor (1/4W) | 1 |
| 4.7µF Electrolytic Capacitor | 1 |
| 4011B Quad 2-Input NAND ... | 1 |
| 470 Resistor (1/4W) | 1 |
| 470K Variable Resistor | 1 |
| 560 Resistor (1/4W) | 2 |
| 68K Resistor (1/4W) | 1 |
| 820 Resistor (1/4W) | 1 |
| 9V Voltage Rail (Ideal) | 2 |
| Bargraph Display (Green) | 1 |
| BC212 PNP Transistor | 1 |
| BC547B NPN Transistor | 1 |
| LED (Amber) | 1 |
| LM3914 (Linear) Dot/Bar Dis... | 1 |
| Loudspeaker (64 Ohm) | 1 |
| NE555 Bipolar Timer | 1 |
| Push-to-Make | 1 |