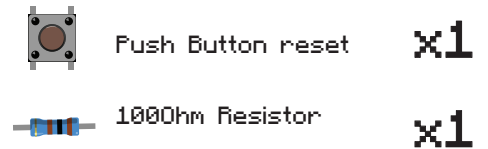
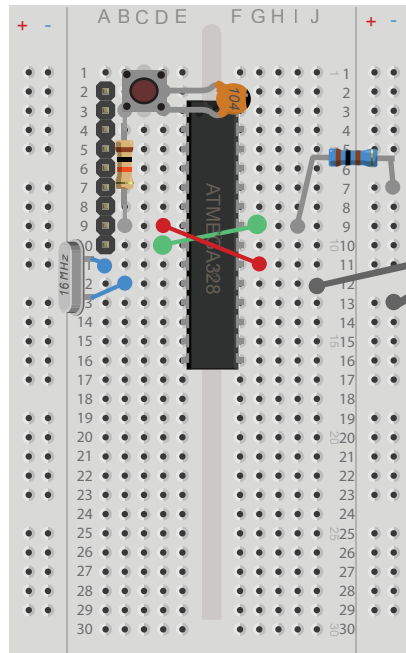
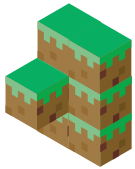
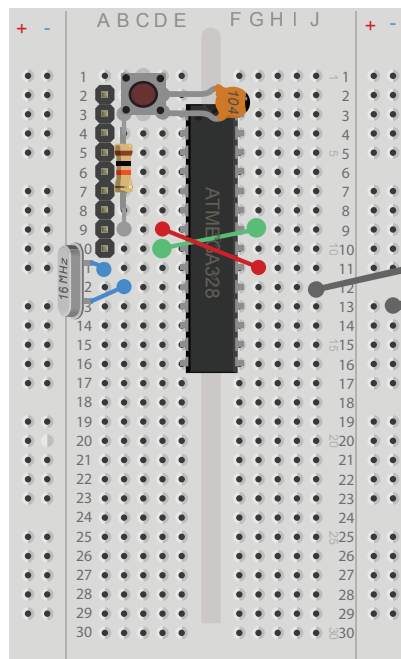


#Place the red LED between J12 & any point on the blue (-'ve) rail.

The long anode pin is +'ve while the shorter pin is the -'ve cathode and is on the side of the slightly flattened part of the clear LED plastic. You need to get this right or it won't light up! Notice inside the LED the cathode (-'ve) the metal end is larger than the anodes pole

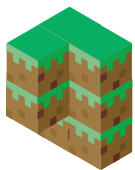


Next add a 100Ohm resistor (brown, black, brown, gold) between I9 (ground; follow the jumper wire back to ground on the USB) and any point on the blue (-'ve) rail.

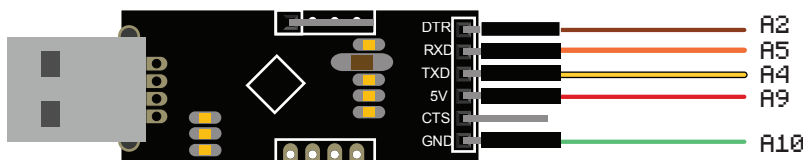
This is a current limiting resistor for the LEDs

Now add a push button between C1 & C3 which when pressed will pull the current down and trigger a re-boot. The 104 capacitor protects the ATMEGA328 from this surge.

You've now made a basic unprotected shrimp and will be able to upload the Blink sketch



This is a CP2102 USB adaptor it lets you communicate with your shrimp over USB and serial



#Download & install USB drivers from

<http://shrimping.it/drivers/cp2102/>

#Connect up the USB serial adaptor with the coloured ribbon connector as shown

Once plugged in it should appear as COM1 or COM0 in Windows, depending on your Computer. For UNIX systems like Linux and Mac OS it should be listed in /dev as tty.SLAB_USBtoUARTUSB or similar.