Use the two provided screws to attach the battery holder to the breadboard. Put nuts on the back of the board.

Wire the clock circuit at the upper-left corner of the breadboard as shown on the right. Follow the schematic diagram. Make sure every wire is connected and joining the right points. Cut each wire to the right length. Lay components and wires down and flat on the breadboard. Pay attention to the orientation of the IC chips, the polarity of the electrolytic capacitor and the light emitting diodes.

Connect/disconnect the ground wire to switch the circuit on/off.

Tape the holes on the 9V line here to avoid accidental short-circuit.

List of Parts

- Breadboard x1
- 9V battery x1
- 9V battery clip x1
- 9V battery holder x1
- Screw and nut x2
- 555 timer IC x1
- 14520 binary counter IC x1
- Resistor 470 Ω x2
- Resistor 22 KΩ x1
- Resistor 33 KΩ x1
- Light emitting diode x2
- Wire stripper x1
- Needle nose plier x1