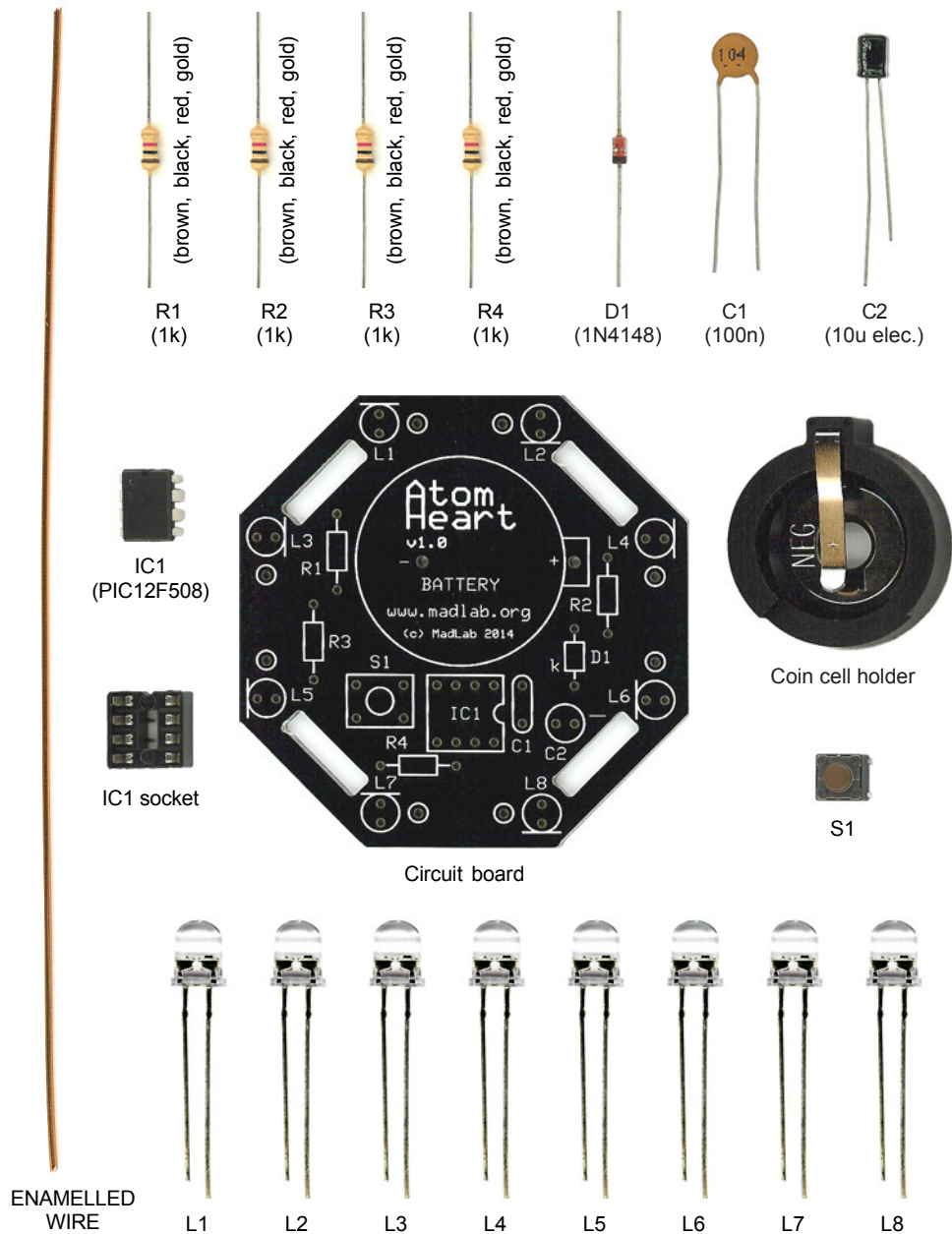
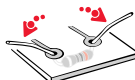
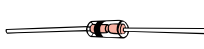
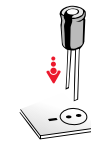

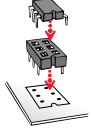


# ATOM HEART

a decorative kit that displays patterns of blue light



- 1 Identify the different components using the spotter chart.
- 2 Fit and solder the resistors (R1 to R4) flat onto the picture side of the circuit board. They can be fitted either way around. 
- 3 Solder the diode (D1) matching the black stripe to the 'k' sign on the board. 
- 4 Fit and solder the electrolytic capacitor (C2) to the board putting the shorter leg into the hole with the - sign. The shorter leg also has a stripe on the side of the body. Fit and solder the ceramic capacitor (C1) either way around. 
- 5 Solder the chip socket (IC1) matching the notch in the socket to the notch on the board. **Do not solder the chip directly to the board.**
- 6 Solder the lights (L1 to L8) to the board putting the shorter leg into the hole with the line. The shorter leg also has a flattened edge on the rim. 
- 7 Solder the pushbutton (S1) either way around.
- 8 Solder the coin cell holder (BATTERY) matching the shape of the holder to the shape on the board.
- 9 Uncoil the copper-coloured wire and cut it into 4 equal length pieces, each about 25cm. Bend the pieces of wire into 4 coils each of 8 turns about 5mm in diameter and with short tails at the ends. Fit them to the board between the pairs of lights. Bend the ends of the wires over on the back of the board to hold the coils in place and trim the ends.
- 10 Carefully bend the legs of the chip inwards a little with your fingers. Fit the chip into its socket matching the small notch in the chip to the notch in the socket. 
- 11 Fit a pair of coin cells (**2 x 3V CR2025**) into the coin cell holder making sure the plus signs (+) on the coin cells are uppermost. If *Atom Heart* is working properly all the lights should flash twice.

## HOW TO USE

Press the pushbutton to start the sequence of lights. Press it again to step through different patterns and eventually to turn off the lights.