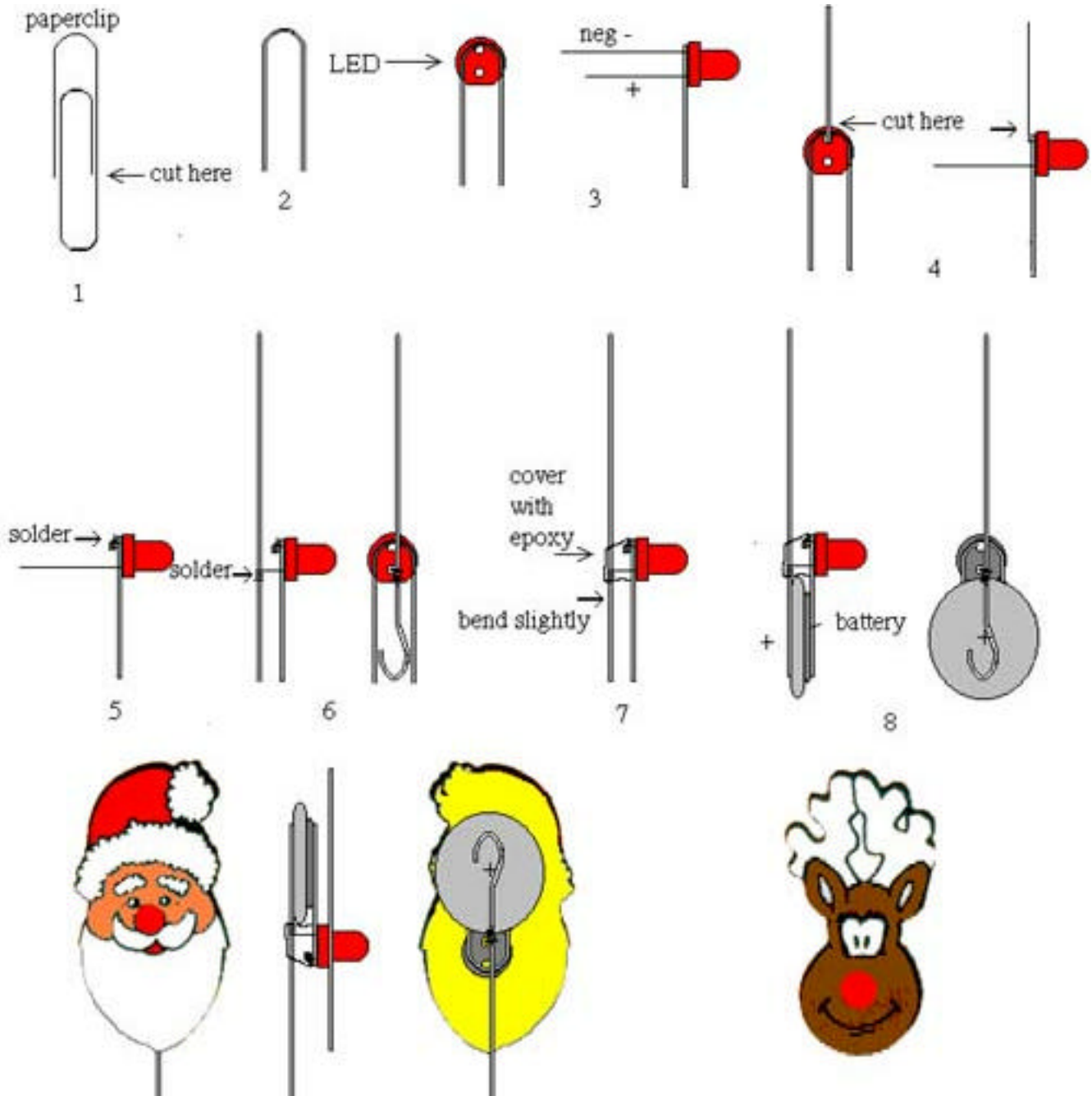


Christmas blinking light stickpin  
 Instructions for making a Santa or Rudolph blinking nose stickpin

Assembly diagram:



Parts:

Battery.....+ 3 volt Allied 884-0755 or 884-0750

Other Parts:

Red blinking LED.....any blinking LED with a minimum operating voltage of 2 volts or less.

Stickpin..... hobby or craft store

Paperclip..... Office/school supply store

Construction:

Please refer to the diagram

1. Cut the big "loop" from a standard size metal paper clip
2. & 3. Hang the "loop" over the negative (-) terminal of the blinking LED.
4. Bend the negative (-) lead of the LED vertical so it holds the "loop" firmly against the base of the LED.
5. Solder the negative (-) lead to the "loop" and cut off the excess lead.
6. Wind the positive (+) lead of the LED around the stickpin three or four times as shown. Solder the positive (+) to the stickpin and cut off the excess lead. The distance between the stickpin and the "loop" should be the width of the battery.
7. Angle or bend the stickpin towards the open end of the "loop" so that the open end of the "loop" and the bent end of the stickpin are closer at the end than they are at the base of the LED. This provides a little tension required to hold the battery securely. Next cover the solder connections and the entire base of the LED with epoxy
8. Place the battery between the stickpin and "loop" with the positive (+) side toward the stickpin. The LED will begin to blink.
9. Print out the Santa and Rudolph pictures and cut them out. Punch a 3/16-inch hole in the nose and slip the face over the LED.
10. This completes the construction of the Christmas stickpin.