

LED Christmas Tree Decorations

You will need:

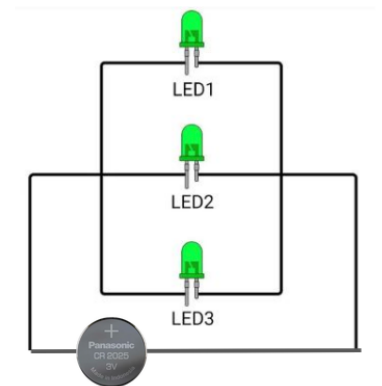
- Card (A4/A5)
- Copper tape
- LED(s) (3mm or 5mm)
- Coin cell battery (CR2032)
- Felt pens/colouring pencils
- Ribbon

Step 1- Design

- Draw outline and basic design
- Think of where an LED(s) could go.
- Colour in your design.

Step 2- Plan your circuit

- Make a hole through from the LED position on outside of card.
- On inside of card mark position of battery.
- Show the + and - copper tape paths. (they must never touch)
- Show the + (long leg) and - (short leg) LED position on inside.
- If using more than one LED- set up in parallel. (If one burns out- circuit doesn't break)



Step 3- Apply the copper tape

- Peel the tape carefully.
- Press firmly to ensure good contact.
- Fold (away from you and then back again) at corners instead of cutting- to allow the current to flow smoothly.

Step 4- Add the LED

- Bend the LED legs flat.
- Stick the **long leg (+)** on the positive tape.
- Stick the **short leg (-)** on the negative tape.
- Tape them down securely with clear tape.

Step 5- Add the battery

- Place the coin cell battery with the **+** side facing up.
- Use copper tape to connect the **- side** underneath.
- Test the LED.

Step 6- Add the hanging tag

- Cut a length of ribbon to hang your decoration
- Stick the loop to the back of the card to hang your decoration.

