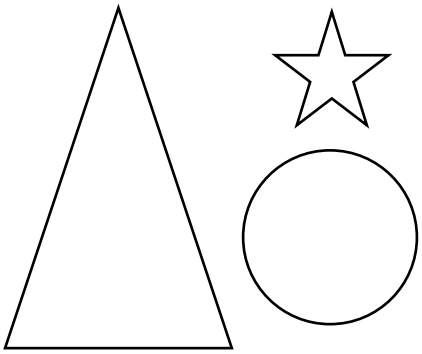
Christmas Tree Earrings

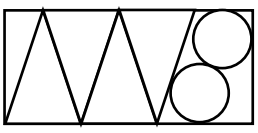
Pattern and Instructions

Your kit should include:
1 x Instruction manual
1 x yellow felt rectangle
1 x green felt rectangle
2 x earring hooks
2 x yellow LED
2 x resistors
2 x batteries
1 x wire
1 x green thread
1 x needle

You will need:
1 x scissors

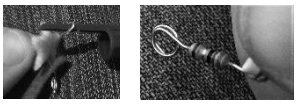


Step 1: Cut out pattern provided, cut out felt, laying pattern as:

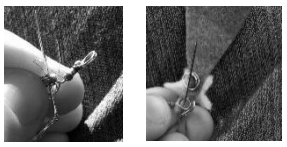


Step 2: Push both the LED wires through the star, push the lower leg through the top of one triangle and the upper leg through the other triangle.

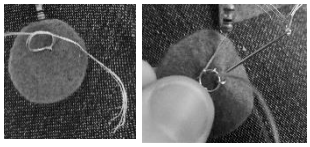
Step 3: Make circles of the LED and resistor wires, by twisting them around the point of a pencil.



Step 4: Use some wire to hold one circle of the LED to one circle of the resistor.



Step 5: Thread some wire and sew the other circle of the resistor lead onto the middle of the circle felt.

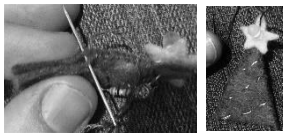


Step 6: Thread some wire through the circle of the LED and use the tail to make a tinsel pattern on one of the triangle felts leaving a tail at the end.

Step 7: Using the thread tail sew a large X into the lower middle of the blank triangle.

Step 8: Place the circle over the X use the green thread to sew the circle in place sewing around the edge of the bottom side of the circle.

Step 9: Keep the triangles together so that the LED wires are separated by the second triangle. Use green thread to sew the triangles together and the star on top.



Step 10: Use the tail of the thread from step 9 to sew the star onto the earring hook.

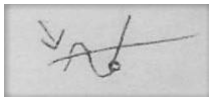
Step 11: Slide the battery into the circle pocket.

Step 12: Repeat to make a second earring.

Types of stitching you will need to do:
Conductive circle stitches, steps 4, 5, 6.
Running stitch, steps 6, 7, 8.
Whip stitch, step 9.

How to do Conductive circle stitches:
Thread wire into the needle.
Push the needle through the circle of the lead.
Pull wire until there is only about 3 cm left on the tail end of the wire.
Use the 3cm to make an overhand knot around the lead.
(to make an overhand knot make a circle and push the end through the middle of the circle and tighten the circle to cinch it.)
Cut any tail off the knot.
Thread the needle and wire through the middle of the lead circle over and over again from the same side so that there are small circles all the way along the edge of the larger led circle.

How to do Running stitches:



Tie an overhand knot on the end of the thread.
(except on step 6 when you continue sewing from the conductive circle stitch.)
Push the needle through the fabric from the side that will not be visible when the earing is finished to hide the knot.
Pull through until the knot hits the fabric.
Push the needle through from the side that it is on a short way down the imaginary line you are following.
Pull through until thread is no longer loose but not yet pulling the fabric together making it bunch.
Then repeat the last two steps as needed.
To finish tie another overhand knot as close to the fabric as possible.

How to do Whip stitches:

Tie an overhand knot on the end of the thread.
Push the needle through the fabric from the middle of the two bits of material so that it will not be visible when the earing is finished.
Pull through until the knot hits the fabric.
Push the needle through both pieces of fabric so that it comes out on the same side it did last time, further along the edge.
Pull through until thread is no longer loose but not yet pulling the fabric together making it bunch.
Keep pushing the needle through from the same side looping around the edge of the fabric until you have gone all the way around.
To finish loop up to the star push it through near the top and use the thread to tie onto the earing hook.
Tie onto the earing hook using two overhand knots.
To finish a whip stitch on a different project, bring your needle out between the two pieces of fabric and tie an overhand knot as close to the fabric as possible.

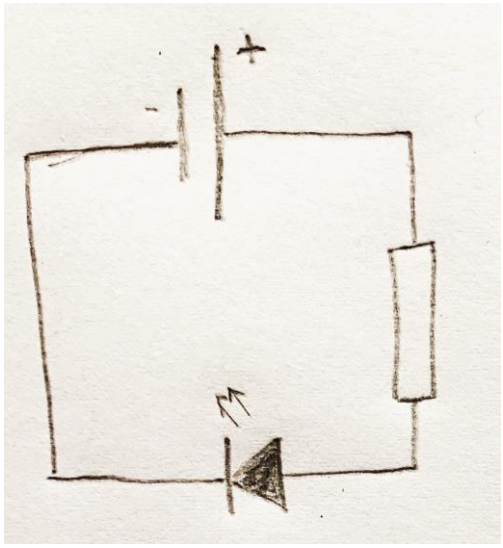
Why isn't it working?

If you have finished and the lights are not turning on these are some things to try to fix it. And the basics of how simple circuits work.

The first thing to try because it is easiest to fix is to put the battery in facing the other direction. LED's only allow electricity to flow (and light them up) in one direction.

If that does not fix it, you will need to look closer at your circuit and wiring. And test your circuit with the battery facing each way after you make any changes.

Your circuit as an electrical diagram should look like this.

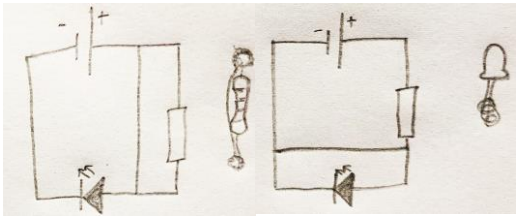


The plus negative symbol at the top is the battery, the rectangle on the right is the resistor and the triangle line with arrows pointing out on the bottom is the LED.
The straight lines are wire, in real life they go everywhere and are not at all straight.

The important things to note on this diagram is that the wire and components together make a circle (or rectangle) so that the electricity travels through every component (not around any) and back to the start to complete the circle.

If the wire before a component touches the wire after that component the electricity will not travel through that component and the LED will not light up.

This is what that looks like with the resistor or the with the LED.

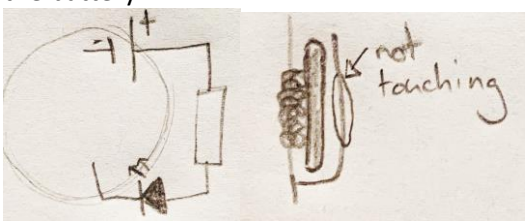


This can happen if you do not cut the wire between step 4 and 5. Or if the felt between the LED legs does not separate them well enough, or the stitching comes through and extra layer of felt.

To fix this, cut unneeded wires that skip across components or put extra felt (or some paper) between wires that touch when they shouldn't.

If the wires do not make a complete circle back to the other side of the battery the electricity will not be able to travel in the circuit at all and the LED will not light up.

This is what that may look like Iif it happens at the battery.



Although it can happen at any point in the circuit.

To fix this use wire to connect the gap. This may mean joining a point that was missed or cut earlier, or you may have to put extra wire between the battery and the wire on the felt to make sure they touch.

What if my light is flashing or lights up sometimes and turns off other times by itself.

That means that you have one of the above two problems, but only some of the time. The battery may be bumping into the wires instead of resting against it or the wires on the front of the triangle may sometimes bump into the wires on the back. Follow the advice above to fix this.