

CUSTOM LIGHT-UP TOTE BAG WITH INTEGRATED LED

EXPERIMENT

MATERIALS YOU'LL NEED

- PLAIN FABRIC TOTE BAG
- LED DIODES
- COIN BATTERY
- COIN BATTERY HOLDER
- 220 OHM RESISTOR
- ELECTRICAL TAPE
- DECORATING MATERIALS (EMBROIDERY STRING, POMPOMS, GOOGLY EYES, RIBBON, NEEDLE),
- SCISSORS
- WIRE STRIPPERS
- HOT GLUE



STEPS

1. DECORATE THE TOTE BAG

1. USE DIFFERENT MATERIALS SUCH AS EMBROIDERY, FABRIC PAINT, PATCHES, OR SEQUINS.
2. SECURE THEM WITH SEWING OR HOT GLUE DEPENDING ON THE TYPE OF DECORATION.



2. INSERT THE LED

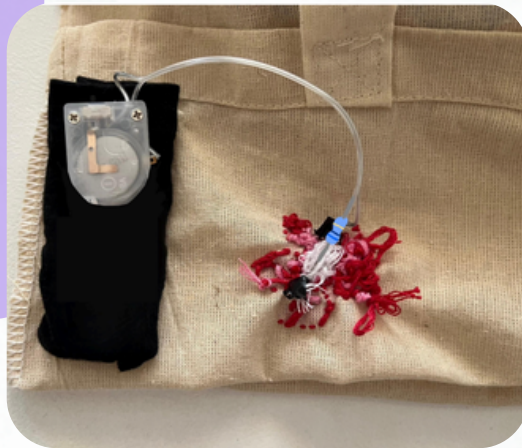
1. CHOOSE WHERE YOU WANT THE LED TO SHOW ON THE DESIGN.
2. PUSH THE LED LEGS THROUGH THE FABRIC SO THEY STICK OUT ON THE INSIDE OF THE BAG.
3. FLIP THE TOTE BAG INSIDE OUT TO ACCESS THE LED LEGS.
4. FLATTEN THE LED LEGS AGAINST THE FABRIC ON EITHER SIDE TO KEEP IT IN PLACE.

3. ATTACH THE RESISTOR

1. TAKE A RESISTOR AND WRAP IT AROUND THE POSITIVE LEG OF THE LED.
2. SECURE THE CONNECTION WITH ELECTRICAL TAPE.
3. WRAP THE OTHER END OF THE RESISTOR TO THE POSITIVE WIRE OF THE BATTERY HOLDER, AND TAPE IT SECURELY.

4. COMPLETE THE CIRCUIT

1. WRAP THE NEGATIVE LEG OF THE LED TO THE NEGATIVE WIRE OF THE BATTERY HOLDER.
2. USE ELECTRICAL TAPE TO KEEP THE CONNECTION STRONG.



5. POWER THE LED

1. INSERT THE COIN BATTERY INTO THE HOLDER.
2. TEST THE CIRCUIT BY SWITCHING THE BATTERY HOLDER ON AND OFF TO CONFIRM THE LED LIGHTS UP.

6. OPTIONAL BATTERY POUCH

1. CUT A SMALL PIECE OF FABRIC.
2. FOLD IT INTO A POUCH SHAPE AND SECURE THE EDGES WITH HOT GLUE INSIDE THE TOTE BAG.
3. PLACE THE BATTERY HOLDER INSIDE THE POUCH FOR EASY ACCESS AND TO PREVENT IT FROM INTERFERING WITH YOUR BELONGINGS.

FINAL RESULT

