

LED ART



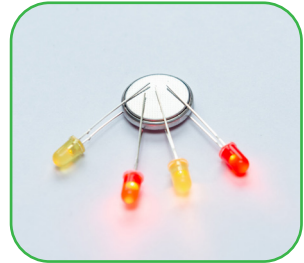
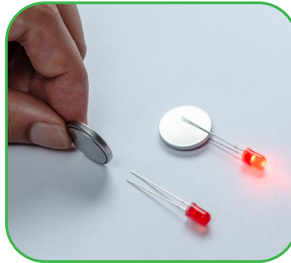
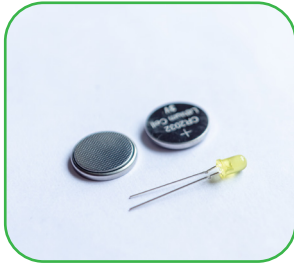
LED art are drawings and crafts equipped with LEDs to make them more fun and lively. We can create these art on various themes and occasions. Would you also like to learn how to make these?

WE WILL NEED THESE MATERIALS



BEFORE WE START MAKING, LET'S TINKER TO GET FAMILIAR WITH THE ELECTRONIC COMPONENTS. LET'S TRY THE TASKS GIVEN BELOW

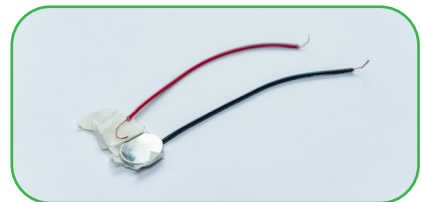
- Glow the LEDs using coin cells



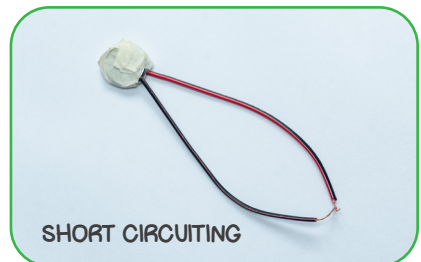
THE TWO LEGS OF AN LED ARE UNEQUAL. WHY DO YOU THINK IT IS SO? DOES IT MAKE A DIFFERENCE WHEN CONNECTING AN LED TO A COIN CELL?



- Let's use wires to glow LEDs at a distance from the coin cells
 - » **Caution: Make sure you don't short circuit the coin cell by directly connecting the positive and negative terminals.**



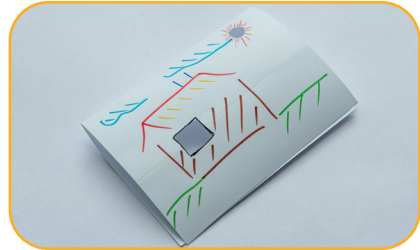
Note: When the positive and negative terminals of a battery are directly connected, a high amount of current flows through the circuit. This is known as short circuiting. It can quickly drain the battery. Although uncommon for low voltages, the battery can also explode if it gets overheated.



NOW THAT WE ARE FAMILIAR WITH THE TECHNICAL SIDE OF THIS ACTIVITY, LET'S MAKE SOME ART USING LEDs. THESE INSTRUCTIONS WILL GUIDE YOU.

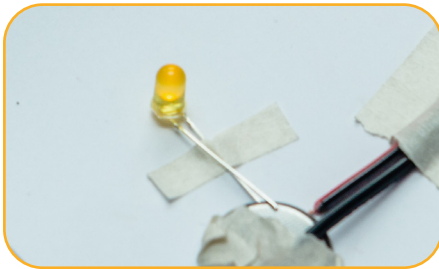
1

Cut a rectangular piece of paper and fold it in half. Draw a picture of your choice on it. Cut out the portion where you want to place the LED.



2

Bend the LED legs perpendicular to the head and stick the LED on the page below, such that the head of the LED lies directly below the cut portion.



3

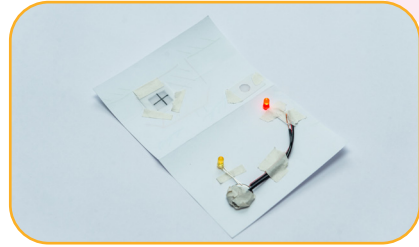
Cover the cut portion in the upper page with a small piece of tracing paper from below. Insert the coin cell to make the LED glow.



4

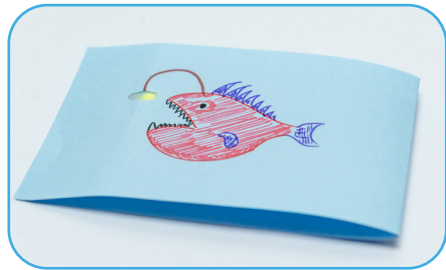
You can also use wire to make multiple LEDs glow.

Now gently turn the page over to see your art complete. How does it look?



SHALL WE CREATE OUR OWN DESIGNS OF LED ART NOW? LET'S COME UP WITH CREATIVE WAYS TO USE LEDs.

HERE ARE SOME SAMPLE LED ART TO HELP YOU GET IDEAS.



SHARE YOUR WORK
WITH FRIENDS AND
EXCHANGE FEEDBACK.
LOOK AT THEIR WORK
AND ASK QUESTIONS TO
GET IDEAS.



Think like a physicist

Why is it not possible to glow red and blue LEDs simultaneously using the same coin cell?

Think like a designer

What colors look good when used together? What colors don't look good together?

Let's experiment
with the
design



- How can you improve the design of your LED art? How about making a larger art? or a tiny one? What other materials can you use here?

Reflection

- You used technology to express yourself. How does it feel?
- How did feedback and ideas from your friends help improve the design of your LED art?

