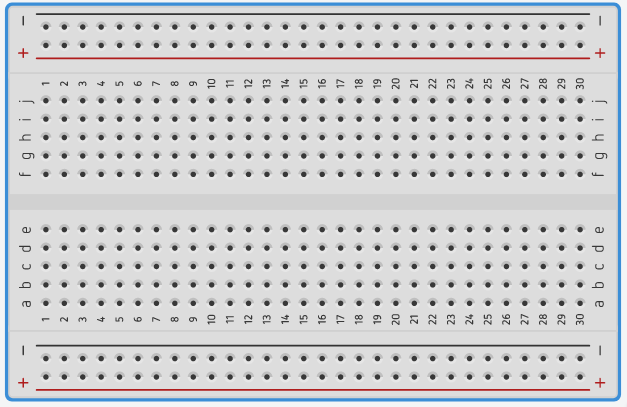
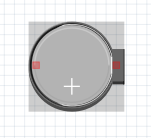
**iCREAT I - Module 2 - LAB 1:**

**Lighting up an LED with a Battery**

horizontal line

**Components to use:**

# BreadBoard LED coin battery

# 

# 

# 

# 

# Battery Resistor

**Simulator:** [TinkerCad Circuits](https://www.tinkercad.com/learn/) > Learn > Circuits

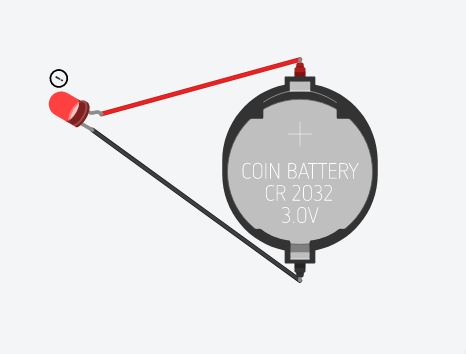
# Objective: Light up an LED using a battery. All the experiments must be first simulated on the simulator at [TinkerCad Circuits](https://www.tinkercad.com/learn/)

# 

# Background / Scenario

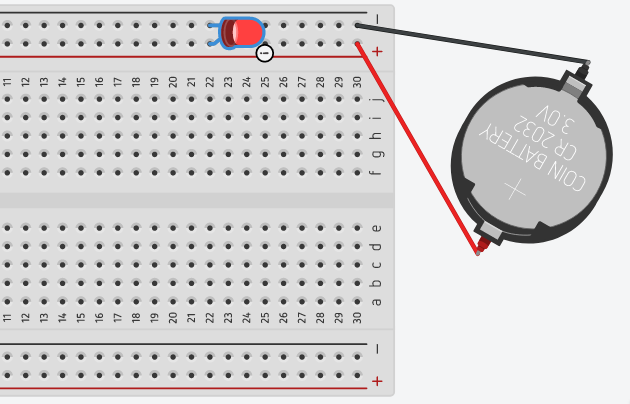
|  |
| --- |
| Working on this lab will make you comfortable lighting up an LED using a battery as well as using the Autodesk simulation tool. |

# Required Resources:

* Breadboard
* LEDs
* Coin battery and **9-Volt** battery
* Resistor

# Part 1: Light up the LED using a coin battery

### Step 1:

1. Simulate it on the simulator.
2. Take an LED and identify its +ve leg and -ve leg. Long leg is +ve
3. Take a 3-volt coin battery and identify its +ve terminal and -ve terminal
4. Attach long leg with +ve terminal of the battery and short leg with the -ve terminal.
5. Does the LED light up?
6. Implement your design.

# Part 2: Light up the LED using a 9-volt battery, resistor and breadboard

### Step 1:

1. Simulate it on the simulator.
2. Need a Hint? [How to light an LED - Electronics lab](https://www.youtube.com/watch?v=wa6YIGck-0Q) video
3. Attach long leg with +ve terminal of the battery and short leg with the -ve terminal.
4. Use the correct resistor. What do you need?
5. Implement your design.

