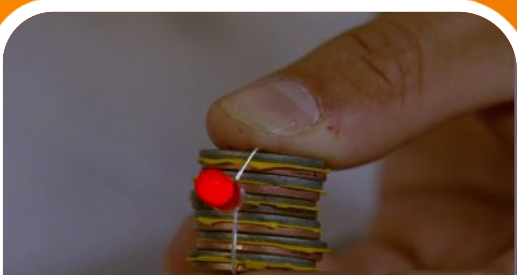




Electricity & Circuits Activity for Kids



Watch Video

Coin Battery DIY

 Duration: **30 min**

 Difficulty: **Medium**

 Cost: **\$0 to \$10**

Learn how to make a battery out of coins to power an LED!

Material List

- 1** Teaspoon of salt
- 1** Cup of water
- 1** Red LED light
- 6** Pennies
- 6** Zinc washers
- 1** Bowl of $\frac{1}{4}$ Cup of Vinegar
- 1** Piece of Construction Paper
- 1** Pen
- 1** Pair of scissors

Instructions

- 1** In a bowl, mix 1 teaspoon of salt into $\frac{1}{4}$ cup of vinegar.
- 2** Soak the pennies in the salt/vinegar mixture for 5 minutes, then wipe them off.
- 3** Trace pennies on construction paper and cut them out to make 6 paper discs.
- 4** Soak the paper disks for 5 min in a mixture of 1 cup of water and 1 tablespoon of salt.
- 5** To assemble the battery, stack the items in this order: coin, paper, washer, coin, paper, washer, and so on.
- 6** Hold the LED light's long wire to the penny side of the stack, and the short wire to the zinc side of the stack.
- 7** Dim the light and your LED should light up!

How It Works

In this DIY you made a battery! Batteries convert chemical energy into electrical potential energy. That energy can be used to power a circuit, or in our case, an LED light. The more stacks there are, the higher the voltage of the battery and the brighter the light will be. The difference between a 1.5-volt battery and a 9-volt battery is how many stacks of chemicals they have inside.