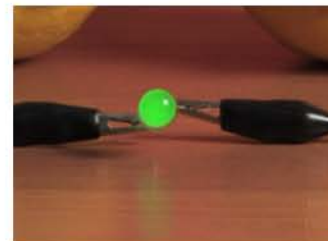
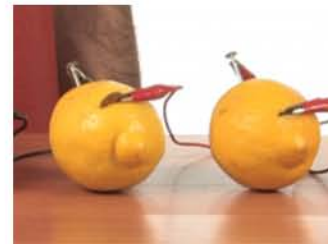


# FRUIT POWER

Voltaic batteries of all shapes and sizes are objects that convert chemical energy into electrical energy. You probably use batteries to power your cell phone, iPod, or any number of wireless gadgets. But did you know that you can actually use chemical energy stored within a lemon to power a small LED light? It's true, and we'll show you exactly how in the Fruit-Power Battery experiment.

## Materials

- Four lemons (the bigger and juicier the better)
- Four pennies
- Five zinc-galvanized nails
- Five sets of alligator clips
- LED light
- Kitchen knife
- **ALWAYS HAVE AN ADULT ASSIST YOU WITH ANY ELECTRICAL EXPERIMENT**



## EXPERIMENT

1. Use a kitchen knife to cut a penny-sized slit in all four lemons.
2. Insert a penny halfway into each of the four slits that you cut.
3. Push a zinc-galvanized nail into each of the lemons, opposite the penny. Be sure you don't let the nail and penny touch each other.
4. Connect all four lemons together with alligator clips. Each set of alligator clips should connect a nail with a penny.
5. Attach the two loose alligator clips to the LED light.

**Check that out! The energy from the lemons lights up the LED.**