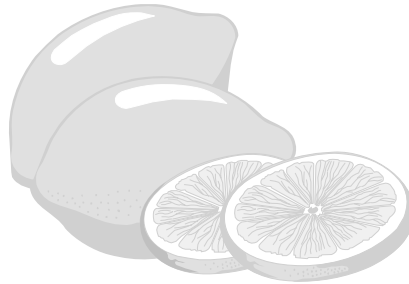


Lemon Battery

Materials

- A fresh lemon
- An old penny (mid-70s or earlier)
- A paperclip



Procedure

1. Push the penny and the paperclip into the lemon, tops sticking out of the rind. They should be side by side but not touching each other.
2. Touch your tongue to the penny and the paperclip simultaneously. What do you feel?

Inside the lemon are electrolytes, free ions that have an electrical charge. A chemical reaction causes electrons to build up on one of the metals and to decrease on the other metal. When you touch your tongue to both, you close the circuit and can feel a slight tingle and taste a metallic flavor. This indicates that electricity is flowing!

