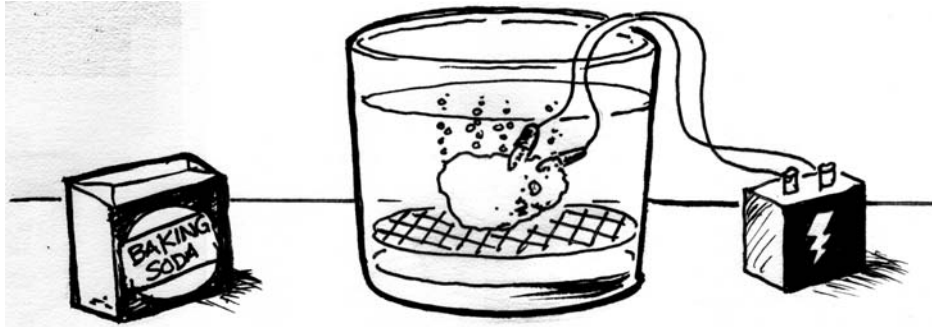


Electrolysis



The Challenge

Use electrical currents to clean a penny

Got a grubby penny in your pocket? Use electrolysis to make your penny shine!

1. Fill the cylinder with water.
2. Hook the copper wire to the battery—the red wire should be attached to the positive terminal (+) and the black wire should be attached to the negative terminal (-).
3. Make sure the other ends of the wire DO NOT touch each other.
4. Fasten the other end of the black wire (-) to the penny and place it in the water.
5. Attach the other end of the red wire (+) to the paper clip and place it in the water too.
6. Watch the bubbles form and rise from the penny and the paper clip! What happens if you add 1 tablespoon of baking soda or salt to the water? Try it and see!

What's Happening

Electrolysis is a standard cleaning procedure used in archaeology. By passing a weak current through the water using the wires and the battery, deposits and grime that have accumulated on the artifact will be removed.