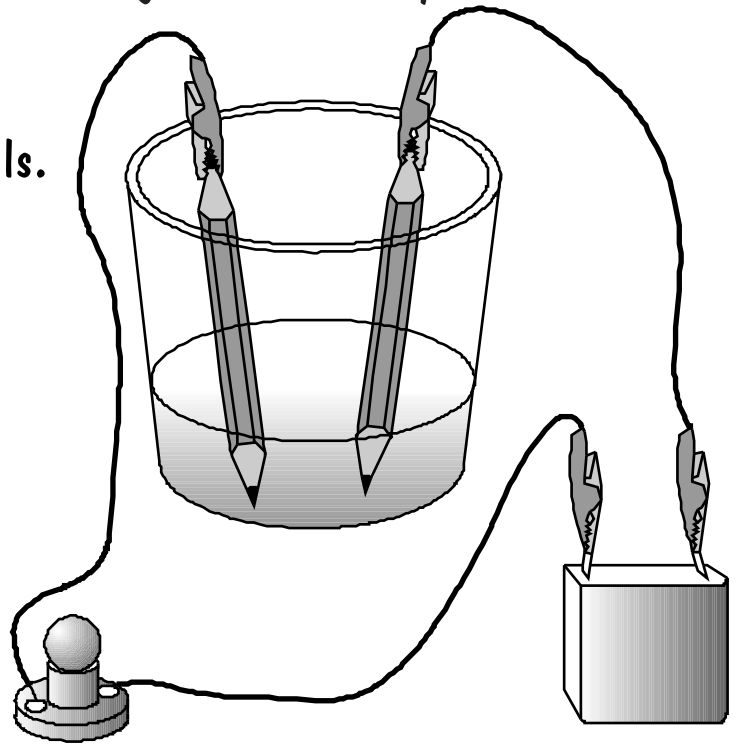


COPPER PLATING

WARNING!

The copper sulphate solution that you are using in this activity is harmful.

1. Sharpen both ends of two small pencils.
2. Attach a crocodile clip to the tips of each pencil and set up the apparatus as in the diagram.
3. Check that you have a complete circuit by touching the pencil tips together to light the bulb.
4. Dip the pencils into a beaker containing the copper sulphate solution.
5. Watch what happens after a few minutes to the tips of the pencils.



SAFETY!

- Copper sulphate is harmful if swallowed.
- Glasses should be worn when using the crystals or the solution.
- Children should wash their hands and any plated objects thoroughly after the activity.
- Small amounts of dilute copper sulphate solution can be flushed down a sink with a large quantity of water, unless local rules prohibit this.

IDEAS TO INVESTIGATE

- What happens if you replace the copper plated pencil with a metal object?
- What happens if you change over the pencils?
- Find out how electroplating is used in industry.