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EXPLORING CLOSE TO HOME

EVEN IF YOU GO no farther than your neighborhood park, your backyard, or your balcony, there is plenty of nature out there for you to discover. Sometimes you can even bring nature into your own room.



SUPPLY LIST

YOU WILL NEED

One lemon, perhaps two

A nail (which must be galvanized, which means covered in zinc)

A straightened copper paper clip or some copper wire

Regular wire (to wrap around the nail and the copper wire)

A small light bulb (a bulb from a bicycle light will work nicely)

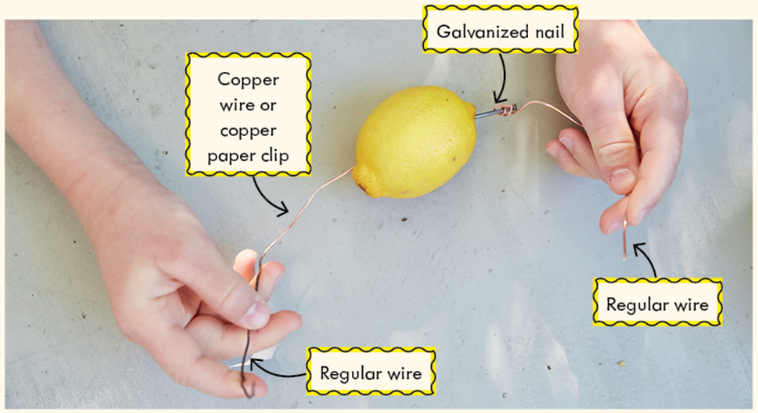
Electric Lemons

ACTIVITY

DO YOU WANT TO TRY another electric experiment? Stick a galvanized nail partway into one end of a lemon and a straightened copper paper clip or a piece of copper wire partway into the other end. Wrap some regular wire around the nail and another piece around the copper paper clip or wire. Hold the wire attached to the nail to the metal threading at the base of the light bulb. Then touch the wire attached to the copper paper clip or wire to the gray dot at the bottom of the bulb. The bulb will light up!

Here's what's happening. As the acid in the lemon dissolves tiny pieces of the nail, electricity flows through these pieces of metal to the copper wire and then to the light bulb.

If one lemon is not strong enough, you can use two. This makes your battery twice as powerful. Just add a second lemon by sticking another straightened copper paper clip or a second piece of copper wire into the ends of both lemons to connect them. Have the galvanized nail with wire wrapped around it in lemon 1 and the first piece of copper wire (with regular wire attached) in lemon 2. Hold the ends of the two wires to the bulb as described above.









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Peter Wohlleben's books about forests and conservation have delighted readers around the world. His children's books include *Can You Hear the Trees Talking?*, a young reader's edition of his *New York Times* bestseller, *The Hidden Life of Trees, Do You Know Where the Animals Live?*, and the picture book *Peter and the Tree Children*. He has written many books for adults including *The Inner Life of Animals* and *The Secret Wisdom of Nature*.

When he is not writing books, appearing on television or in movies, or traveling the world talking to people about trees, Peter can be found at Wohlleben's Forest Academy, where he leads children on educational tours and works for the return of primeval forests.