



# Steel Wool Battery Burn



Try this quick experiment to learn about electricity.

- ⚡ Tease out a small amount of steel wool.
- ⚡ Gently brush it onto the terminal of a 6 or 9 volt battery.
- ⚡ The steel wool will spark and ignite!

What is happening?

The steel wool is like a wire that lets electricity pass through it.

But steel wool is not as good at conducting electricity as copper, [or gold], so the electricity becomes heat, & where it touches the battery the steel gets hot.

Because each strand of steel wool is so thin the heat causes the iron in the steel wool to react with oxygen in the air so it 'burns' & then turns into iron oxide.



## Try this:

See if you can pick up some steel wool with a magnet. Of course you can, it's steel after all. Now try picking up some of the burnt steel wool (from the experiment above) with the magnet. It's not attracted! This is because it has turned into iron oxide and unlike iron, iron oxide is not magnetic.

## SAFETY

Use just a small amount of steel wool. Don't use your whole supply as it will get very hot and could start a fire. Do this experiment on a non-flammable surface.