

## Make a Light Bulb!

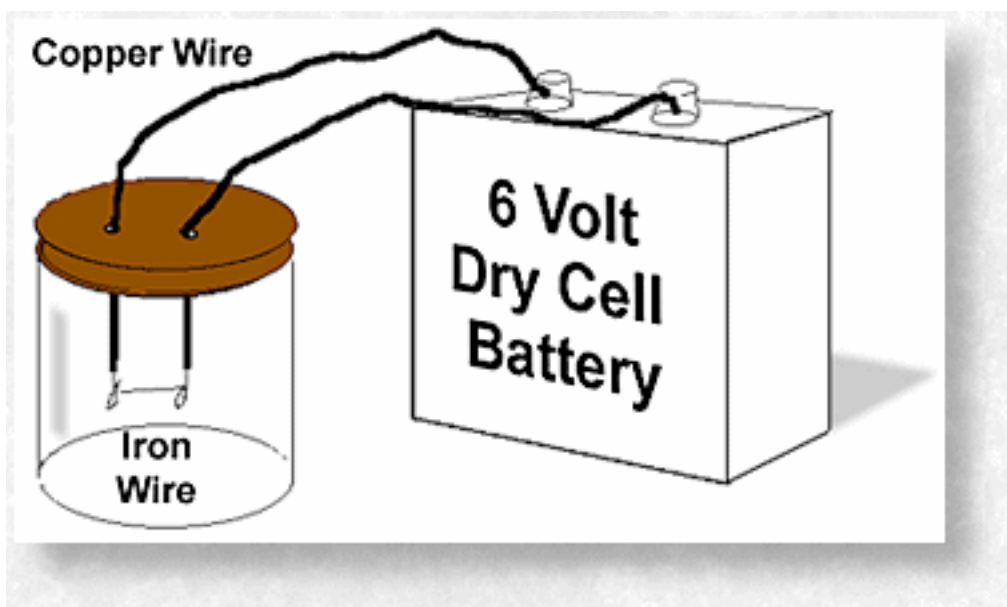
All text and images © Smithsonian Institution

### MATERIALS YOU WILL NEED

- \* One small jar
- \* Cork stopper for a lid
- \* Three feet of shielded copper wire
- \* One 6-volt battery--not a car battery !
- \* Thin iron wire

### PROCEDURE

1. First cut the copper wire into two lengths about 1 1/2 feet long. Cut off an inch of the shielding (plastic coating) at each end of the strands.
2. With a nail, drill two holes into the cork. Push the wire through the holes in the cork so that about two inches of the wire can be seen in the jar.
3. Make a hook at the end of the copper wires so that you can twist small strands of iron wire around them to make a filament.
4. Twist several strands of iron wire together and stretch them across the gap between the two copper hooks to form the filament.
5. Put cork stopper with filament inside the jar.
6. Carefully hook up both copper wire ends to the battery and watch your bulb light up!



**CAUTION: FILAMENT BECOMES HOT! DO NOT TOUCH IT!**