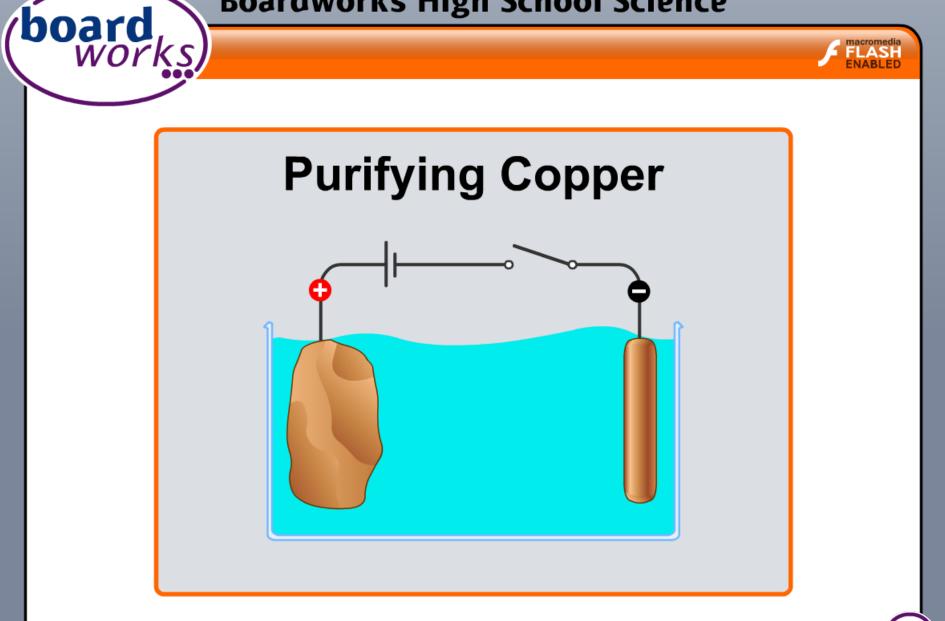
## **Boardworks High School Science**



## **Purifying copper using electrolysis**

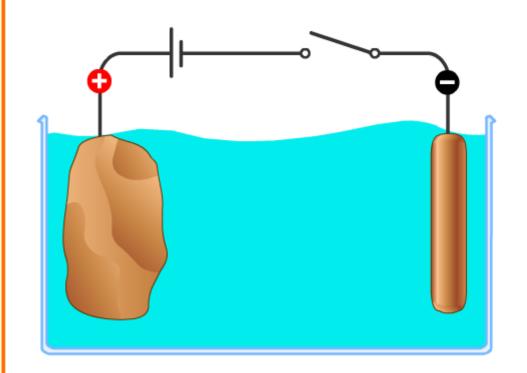


#### How is copper purified by electrolysis?

Electrolysis is used to remove any impurities from copper so that it is pure enough for making electrical wires.

Click **"play**" to find out what happens during the purification of copper by electrolysis.

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# **Purifying copper – redox equations**



What happens at the electrodes during the purification of copper by electrolysis?

At the negative electrode:

 $Cu^{2+} + 2e^{-} \rightarrow Cu$  (reduction)

At the positive electrode:  $Cu \rightarrow Cu^{2+} + 2e^{-}$  (oxidation)



This process is carried out on a huge scale in industry, and the copper formed on the negative electrodes is 99.99% pure.

The precious metals recovered from the impurities are also sold off and help to make this industrial process profitable.





## **Purifying copper – true or false?**





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