

REVISION CARDS - METAL FINISHES - 6

ELECTROPLATING

V.Ryan © 2000 - 2018

On behalf of The World Association of Technology Teachers

W.A.T.T.



World Association of Technology Teachers

This exercise can be printed and used by teachers and students. It is recommended that you view the website (www.technologystudent.com) before attempting the design sheet .

THESE MATERIALS CAN BE PRINTED AND USED BY TEACHERS AND STUDENTS.
THEY MUST NOT BE EDITED IN ANY WAY OR PLACED ON ANY OTHER MEDIA INCLUDING WEB SITES AND INTRANETS.
NOT FOR COMMERCIAL USE.
THIS WORK IS PROTECTED BY COPYRIGHT LAW.
IT IS ILLEGAL TO DISPLAY THIS WORK ON ANY WEBSITE/MEDIA STORAGE OTHER THAN www.technologystudent.com

REVISION CARDS - METAL FINISHES - 6

Go to www.technologystudent.com for much more detail and exercises

WORLD ASSOCIATION OF TECHNOLOGY TEACHERS

<https://www.facebook.com/groups/254963448192823/>

www.technologystudent.com © 2018 V.Ryan © 2018

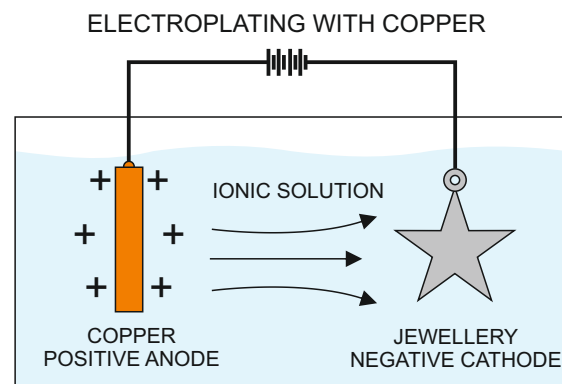
ELECTROPLATING - 1

In industry, electroplating is the process whereby a cheap base metal, is coated with a much more expensive metal, in order to make it visually attractive and aesthetically pleasing (gold and silver plating are examples). Electroplating is usually a decorative process and is often used to increase the visual appeal of cheaper jewellery. It also serves to provide the surface with a level of protection against corrosion. Some everyday products such as bathroom taps have been electroplated with chrome for decoration, as well as corrosion resistance. Electroplating is also used to apply a conductive surface to metals, that are of low conductivity or non-conductive.

www.technologystudent.com © 2017

ELECTROPLATING - 2

The copper anode is ionised once the electrical current is allowed to flow. The ionic solution allows the positively charged copper atoms to flow to the negatively charged base metal, where they are deposited on the surface. This produces an effective coating of copper.



www.technologystudent.com © 2017

ELECTROPLATING - 3

SILVER PLATED GOBLET



CHROME ELECTROPLATED TAP



GOLD PLATED WATCH



COPPER PLATED MUG



SILVER PLATED TEAPOT



www.technologystudent.com © 2017

1. What is electroplating? (include the reasons for electroplating) 5 marks

2. List six products / components that have been electroplated? 4 marks
