

22: Electroplating a Design

Design a key ring fob or a tag for your pet and electroplate it. These make fun gifts!

What you will need

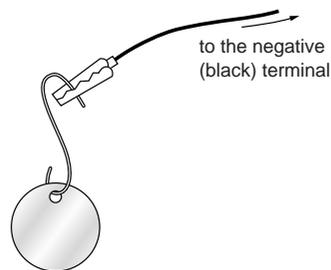
brass disc
 6 cm (approximately) brass wire
 permanent ink felt-tip pen
 electroplating bath (*your teacher will set this up for you to share with other pupils*)
 propanone (**highly flammable**)
 paint brush
 tissue
 soft duster (*shared with other pupils*)

eye protection

What you do

 Your brass disc has been cleaned ready for use: hold it by the edges and be careful not to put your fingers on the front or back surfaces.

- 1 Place your brass disc on a small piece of tissue on the bench. Use a permanent ink felt-tip pen to draw a design on the front of the disc. If you wish, draw a design on the reverse side too.
- 2 Use a piece of brass wire to make a hook to go through the hole in your brass disc. At the other end of the brass wire make a loop so that it can be held by the crocodile clip without slipping (see diagram).
- 3 When it is your turn to use the electroplating bath, place the wire holding your brass disc into the crocodile clip.
- 4 Carefully hold the plastic wire and dip your brass disc into the electrolyte solution so that all of your disc and a little of the brass wire are covered. Do not let the disc touch the copper anode.
- 5 Hold the disc still and turn on the power pack. Let the current flow for only 30-50 seconds. Switch off the power pack.
- 6 Carefully remove the disc from the solution, holding the dry end of the brass wire.
- 7 Rinse your disc under the tap, to remove the acidic electrolyte.
- 8  Using a paintbrush and a very small amount of propanone (**highly flammable**) clean off the permanent ink.
- 9 Dry the disc on a small piece of tissue and 'buff' the disc with a soft cloth or cotton wool until it shines.



Eye protection must be worn.



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