

Conservation Science - Stopping the Rot and Picking Up The Pieces

Activity 2 - Careful With That!

Target Audience and Age-Range

This activity is suitable for Family Audiences. It is suitable for children age 10 and over working on their own and for children from age 7 or 8 working with a parent or other adult helper.

Duration

About 20 - 30 minutes

Background

Proper handling of objects is necessary both for their preservation and for the safety of those handling them. Objects can be damaged by improper handling, and some objects may present significant hazards if handled wrongly. As well as the obvious hazards of manual handling some objects may be potentially toxic or may pose other risks, such as explosion if not handled in the right way. This activity looks at the right ways to handle museum objects, and in particular looks at why gloves should be worn when handling sensitive objects.

When you touch an object with your bare hands you always transfer some sweat and oils to the surface of the object - these are what form fingerprints, so frequently used by the police. The water and other chemicals in fingerprints can attack the surface of an object, leading to staining and corrosion. Also the organic residues of fingerprints can provide food for things like moulds which then grow and attack the object they are sitting on. So, in handling a wide variety of museum objects it is good practise not to touch them directly, but to handle them wearing gloves, to prevent fingerprints being transferred to them.

What You Need

A selection of different types of museum object, and enough gloves etc. for each person in the group.

Non-sensitive glass/glazed ceramic/polished metal objects

Fingerprint Powder

'Fluffy' brush for applying fingerprint powder

Sellotape

Acetate sheet

Overhead Projector

What You Do

Start by talking about the need for proper handling procedures. Then describe how objects should be handled and taking one participant at a time give them the chance to handle the object correctly, under your close supervision. Once everyone has had a chance to handle all the objects move on to the final phase, which is to take some fingerprints off objects that have been handled with bare hands. - This links into

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forensic science, and will get people's interest. Invite members of the group to handle, with bare hands, one of the non-sensitive (ie non-collection) items. Then, using the fingerprint powder and the fluffy brush, lightly brush the powder across the surface of the object. The powder should stick to the fingerprint, revealing it clearly. Gently blow any surplus fingerprint powder off the object (its a good idea to have some paper under the object to collect surplus powder for re-use). Now lift the print by sticking a piece of sellotape across it and peeling this off. The powder should transfer to tape, which can then be stuck to a piece of acetate and then projected onto a screen with the OHP to allow it to be seen easily. Repeat with other objects ad nauseam, making the point that the chemicals in the fingerprint can damage some objects. If possible have some fingerprint marked object(s) to show this.

Health and Safety

No specific hazards, although fingerprint powder is finely divided aluminium and care should be taken not to breathe this in.

Source of Materials

Aluminium fingerprint powder can be got from
PDL Ltd Spycatcher
P.O. Box 5378
London
W1A 6WG
www.spycatcheronline.co.uk
Tel: 020 7224 1435
Email: info@pdlltd.com

A local artist's materials shop (or the cosmetics dept of a chemists) can supply a suitable fluffy brush.

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