Making Moulds

Use plaster of Paris to make sculptures fit for a place on your desk!

sk children to describe a sculpture and many will talk about statues they have seen – perhaps bronzes that have been cast from plaster moulds. While other activities in this issue of *Junior Education Topics* are designed to challenge children's preconceptions about the nature of sculpture, this activity centres on one of the most traditional of processes – pouring plaster into moulds.

The practice of making sculptures from moulds dates back centuries, but it is also still commonly used by sculptors today, with Turner Prize-winning artists Nicola Hicks (see A1 poster and 'ICT link' for samples of her work) and Anthony Gormley, each making a series of striking sculptures using moulds. Plaster is a fascinating material for children to work with – they will love the way it is made from powder and water, how it is quickly transformed from a liquid to a solid, and how it assumes the shape of the mould into which it is poured.

The activities on these pages offer opportunities for children to engage with the material through making objects for a purpose and for once, that will be to create something for their teacher! The sculptures are inspired by objects in and around the classroom – either on show in the room, stored in trays or hidden in the teacher's desk drawer.

Getting started

- Introduce children to the concept of using moulds in sculptures, by showing them an example of something familiar to them that has been moulded. It need not be a work of art in fact, a box of chocolates would be ideal! Draw children's attention to the way that each chocolate in the box is a different shape. They will quickly be able to tell you why each chocolate looks different, but can they explain how this effect has been achieved?
- Some children will be able to reflect on the way that chocolate is made, and may be able to deduce that, when in a liquid state, chocolate can be moulded into shape before it hardens. Other children may need to make connections with other areas. Have they ever made jelly or ice cubes in moulds? Sharing these experiences can raise the key theme of this project, which is that some materials change over time.
- Show children an example of a sculpture that has been made using a mould, and
 ask them to describe how they think it was made. Some will have seen images of
 sculptors chipping away at huge blocks of stone or marble but others may be aware that
 sculptures can also be created using moulds.
- Explain that when a material such as plaster is in its liquid state, it will assume the form of the space into which it has been poured, and that this is the process that children are going to explore in their practical activities.

Curriculum links

NC: Art and design 1b-c; 2a-c; 3a; 4a, c; 5c; science Sc3 2a, f; mathematics 2c

QCA: Art and design Unit 5B - Containers



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Sweet sculptures

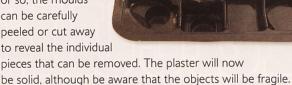
Learning objective: to understand that liquid plaster will assume the form of a space in which it is placed before setting.

You will need: plaster; plastic trays from chocolate and biscuit boxes.

- Provide children with a selection of items that can be used as moulds. Ideally, these will be objects that feature interesting shapes and textures, but which can be discarded after being used – the plastic trays inside biscuit tins and chocolate boxes are ideal.
- Demonstrate to children how the dry plaster is mixed with water and then allow one group at a time to mix amounts
- Once the plaster is ready, children can select a mould and carefully pour the liquid plaster into it. (It is a good idea to have the mould placed within a larger container, such as a bowl, to catch surplus plaster; also consider restricting this part of the process to one corner of the room and protecting the floor with plastic sheets.)
- If you want to make one large piece from the plastic tray,

build up its sides with a thin wall of clay - this will provide a base for the piece.

 Once the plaster is dry, after 30 minutes or so, the moulds can be carefully peeled or cut away to reveal the individual





Differentiation

Support: Ask children to push their hand into a piece of clay, remove it carefully and then fill the cavity with plaster - the clay will be easy to remove when the plaster is dry. Extension: Some children will want to experiment with a range of alternative vessels and receptacles for plaster. Encourage them to bring in a selection from home (rubber gloves can be very effective).

Desk sculpture

Learning objective: to explore ways in which structures can be purpose-built to accommodate liquid plaster and that a range of objects can be used to create interesting effects.

You will need: clay; plaster; small cardboard boxes; range of small items of classroom equipment; assorted textures; Photocopiable 6, 'Making a cast' (figures 1-6 are referenced in the activity below).

• This project is a natural extension of the 'Sweet sculpture' activity, so you may want to carry it out as a prelude to this activity. Begin by reviewing the children's understanding of the process involved, and explain that they will be extending their investigations by constructing

unique moulds of their own. Hand out Photocopiable 6, 'Making a cast', so that children can reference the sheet during your demonstration or their own attempt.

> Demonstrate to children how a cardboard box can be cut along its edges and opened out into a net. (See figure 1 on Photocopiable

Visit www.flowerseast.com to see examples of Nicola Hicks' work.

- 6.) A fruit juice carton is ideal, but any box of a similar size will be fine.
- Ask the children to roll out a thin, even layer of clay on the table, making sure that it is slightly bigger than the cardboard net. They then need to place a layer of the clay over the inside of the card and trim the clay to the same shape as the net (see figure 2).
- Challenge them to take a selection of objects from around the classroom - scissors, pencils, and so on – and to carefully press each one into the soft clay. They could also experiment with pressing in textures, using materials such as bubble wrap (see figure 3).
- Now the box can be rebuilt and the sides taped, ensuring that there are no gaps. The children can now place the box into a bowl and pour the plaster into it (see figures 4 and 5).
- Leave the plaster to dry and then remove the box you should have a solid plaster monument, complete with relief images of details of everyday classroom objects (see figure 6).

Differentiation

plaster structures!

Support: Some children will need to work on a one-to-one basis when using plaster. All children should be able to complete the activity, however, with the appropriate support.

Extension: Children will quickly recognise the potential this process has for making a collection of objects - challenge them to create a miniature city of

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