



# Clay Modelling for Primary Children *by Jenny Mundy*



## The value of clay modelling

Children have a basic need to make models. We can all remember the hours we spent playing in a sand pit, making mud pies, modelling with dough or working with plasticine.

It is possible to approach clay modelling in primary schools in the same way. Teach the children a few simple skills and concentrate on how these can be used in unique and imaginative ways. If at the end of a class each child has produced a model different from others, then you have succeeded in teaching them to be independent modellers.



## Knowing about art

If you want to delve into the background of clay modelling, it is useful to find images of models made by ancient civilisations, e.g. Egypt, Africa, Mexico and Peru. There you will find examples of sturdy figurines and animals. You can discuss with the class the reasons why these people made these models – as toys, for decoration, or to celebrate their religious beliefs, etc.

## Glazing the models

Earthenware clay, because of its attractive terracotta colour, can be left unglazed; it can also be varnished or painted.

To make a clay model even more beautiful on the outside, and water resistant on the inside, it needs to be glazed.

We suggest you try glazing as learning this technique has tremendous educational possibilities – and when children see their pottery glazed, they feel their work is truly valued.



You can use underglaze and then cover it with a clear glaze, or use coloured glazes. The easiest way to apply coloured glaze is to brush it on, or if you want only one colour, use the dipping method



## Help children to understand glazing.

Ask the class if they know what glass is made from. Glaze is a thin covering of coloured glass consisting of silica sand, oxides (from rocks and the ground) and water. When glazes are fired in a kiln at over 1000 degrees, the sand melts and turns into glass. The intense heat changes the colours: for example, cobalt blue glaze is a pale mauve/pink in its liquid form.



## Make a colour chart

A chart will show the children what the colours look like after being fired. Make tiny tiles and glue to a sheet of cardboard. Ask the children to choose their favourite colours.

## Glazing Tips

### Glazing textured surfaces.

Using colored glaze, paint one coat and wipe off the surface.

The glaze will stay in the textured hollows and cracks.

Paint a clear glaze over the coloured area to enhance the texture.

### Keep the base of the model clear of glaze:

carefully wash off any residue before firing.

If the glaze melts, the base will stick to the kiln shelf and the model will have to be broken to remove. If unsure, stilt the model.

### Alternative glazes: use acrylics or tempera paints

- Before applying paint, the clay models must be bisque fired – but will not require a second firing.
- Paint and wipe off textured areas.
- Create washes by watering down paints.
- Seal with a clear sealer. Spray or paint.
- Do not fire painted models. They are complete and the children can take them home.

# Clay Modelling Lesson Plans for Primary Children *by Jenny Mundy*



## Modelling Materials

### Each child will need:

A board approximately 30cm x 40cm

Thin boards, approx 7mm thick for rolling the clay (optional)

A wooden roller  
(thick pieces of dowel are good)

A plastic lid for water  
e.g. a large coffee jar lid

### In a takeaway dish 3 or 4 each of the following:

Craft knives (*see page 51*)

Ice pop sticks (*see page 47*)

Meat skewers

Old paintbrushes for smoothing and joining seams

Metal spikes (*engineering firms make these to order*)

Plain matchsticks (*see page 46*)

Bits and pieces for texturing: buttons, cotton reels, bark, small blocks of wood, wire twisted into loops, nails, plastic bottle tops, old ballpoint pens, caps of old felt pens.

### The teacher will need:

Clay cutter (*buy or make your own from fishing line gut*)

Clay bucket (*see page 26*),

Plastic bags or ice cream containers for storing clay

Plastic squeeze bottles (*see page 19*) filled with water

Lots of newspaper



## Activity One

### Stand-up models using flat slabs

#### Objective

To help children to discover the different patterns and designs which can be created by pressing textured objects into soft clay.

#### Learning about art

Show samples of textured pottery such as planter boxes and tiles. Encourage the children to touch and feel the surface.

#### Motivation

Tell the children they will be making little upright animals in terracotta clay. Ask them to make a list of animals that are the same reddish colour as the clay. Examples include bears, kiwis, cats, bears, kangaroos, mice, ducks, owls ...

#### Materials and organisation

Give each child a piece of clay about the size of a cricket ball. You will also need a box of textured objects such as toothpicks, toothbrushes, old ballpoint pens, pieces of bark, lids of old felt markers, etc.

#### Making artworks

Roll out the clay into a flat slab – about 1cm thick. Trace an animal onto the clay with a toothpick, then cut it out with a knife. Model the tops of legs (include muscles) and smooth off. Add raised features like beaks, eyes, noses, toes, etc. Use tiny coils for manes, tails, whiskers, etc.

Make a stand for the animal. Think about where it would live and make it a habitat. The animal can be instantly joined to the stand by adding lumps of clay to support the back. But for the best result, wait for the clay to harden (1 to 2 hours). Wet both edges and join. Use a tiny coil to smooth the seam.

#### Evaluation

Display the finished models arranged in groups of species. Which models have the most interesting textures? Which models have imaginative stands? Which animals best suit the terracotta colour?



## Activity Two

### Models from a cylinder

#### Objective

To extend children's experiences in making hollow models. This method allows children to make figures, pots, etc.

#### Learning about Art

Find some interesting photographs of clay figures. (Books of English and American porcelain are a good source.)

#### Motivation

Ask the children to draw four tall cylinders on a sheet of A4 construction card. Turn the first cylinder into a bird, the second into a human figure, the third an animal crouching on its haunches, and the fourth a reptile, fish or fantasy sea creature.

#### Materials and organisation

- Abbot's red clay
- Newspaper for stuffing the cylinder.
- Construction card
- Modelling tools (optional)

#### Making artworks

Pat the clay into a square shaped block. Roll the clay flat. Keep turning it over, making sure to keep it as square as possible. Trim into a neat square and slightly thin two of the sides.

Wet the edges you are going to join. Stand the cylinder upright, wrap the clay around and smooth the seam. Try to join it on the inside too. Use an ice pop stick to drag the clay across the joins.

Choose an idea from one of your sketches. Decide how far down the cylinder you want to attach the head. Gently squeeze the clay between your fingers to form a neck.

*Continued page 25.*

Put your finger inside the cylinder at the top where the head is to go and stretch it out in the middle without stretching the top.

Stuff it with newspaper. Close off the top of the head. Now repeat for the lower part. Go all the way down for an animal, slit it for legs for a human. Add legs, arms, beaks, feet, etc.

Clothes can be made using tiny coils: for example, put them around the edge of a jacket and smooth off one side.

**Evaluation**

Place some pieces of wood on bricks and arrange the models like a display in a china shop. How many different types of animals, birds, etc are there? Who remembered to use texture?

**Extensions**

Cylinders are good as the basis for making castles and cute little cottages. Turned on one side and flattened they also make a good base for a reptile.

**Activity three**  
**Clay masks or wall hangings**



**Objective**

To make decorative masks or fish which can be hung on the classroom wall.

**Learning about art**

All cultures make masks. Find examples from Africa, the Pacific, Asia, Europe etc. Explain the various reasons why masks are made. For example, in Africa animal masks give the hunter courage. In our culture, we like to have fun with face painting which makes us immediately feel braver and bolder.



*Festival Mask from Mexico*



**Motivation**

Do some colourful crayon or pastel drawings of masks before starting to make the masks in clay. Think about animal, bird and human features which you can use. Think about decorations which you can add.

**Materials and organisation**

- Pieces of Abbot's clay – about the size of a tennis ball
- Newspaper – half sheet per child

**Making artworks**

Roll the clay into a flat slab about 7mm thick. Crush the newspaper into a head or fish shape.

Drape the clay over the newspaper and cut to shape. Include ears and a head-dress or hair as you cut.

Model a nose or beak or trunk, etc. Attach firmly with water and drag a little bit of clay onto the base with an icepop stick, smooth the join.

Use coils for eyebrows, lips, etc. Cut out the eyes or press in textural effects. (Old hot water bottle stoppers make gorgeous eyes).

Make holes around the top to add hair made from raffia, flax or wool. Attach some earrings – or a bone through the nose is fun.

Paint with acrylics or fluorescent paints, and then varnish.



**Evaluation**

Were the children absorbed?  
Are the masks well constructed?  
Check under the edges. Are they neat?  
If not, add a coil and neaten it off.  
Which children worked independently?  
Who needed a lot of help?

**Extensions**

Owls and other front-facing birds are another possibility. You can choose a theme, eg. a corroboree, a totem pole – make bodies from paper.

**Modelling Tips**

**Work Surface**

Clay works best on a porous surface (or it will stick). Find outdated wallpaper books and tear out the pages. Place the pattern face down on desktop, tape and secure all around the edge using masking tape.

**Cutting Wire**

Use to cut the clay cleanly and evenly. Buy a wire or make one yourself. Use piano wire, fish line, or guitar string, and attach the ends to thread spools, heavy nuts, or sticks. This wire should be about 30cm in length.

**Pin Tools**

Use straightened-out paper clips, forks, or toothpicks when attaching or cutting the clay.



**Basic Modelling Terms**

**Scoring and Scratching**

Rough up the two connecting parts of clay with the pin tool, adding water and pushing the two pieces together.

**Slip**

While scoring the clay, little bits of clay stick above the surface. When adding water to the scored area, the little bits of clay become saturated with water (slip).

**Bisque**

Unglazed ceramic ware that has been fired to a low temperature to remove all moisture and to make handling easier during glazing.

**Firing**

Heating the pottery in a kiln to bring a clay or glaze to maturity.

**Glaze**

Any vitreous coating that has been melted onto a clay surface by the use of heat. Glaze is made of fine ground materials that when fired to a certain temperature fuse into a glassy coating. May be matte or glossy.

**Greenware**

Unfired pottery or sculpture.

**Leather hard**

The condition of the clay body when much of the moisture has evaporated and shrinkage has just ended, but the clay is not totally dry.

**Kiln**

A furnace or oven built of heat-resistant materials for firing pottery or sculpture.



**Jovi Modelling Tools Set**

Set of five potters' double-ended plastic tools for use with clay and modelling compounds.

Code	Description	Price
545100	Jovi Tools, Set/5	\$4.80



**DAS Boxwood Tool Set**

Set of 14 double-ended tools.

Code	Description	Price
546900	Boxwood Tools, Set/14	\$26.00



**Wire-end Modelling Tools**

Set of six tools with a wire loop on both ends for shaping and cutting clay. 20cm.

Code	Description	Price
546850	Modelling Tools, Set/6	\$26.00

**CLAY NOT INCLUDED**



**Clay Bucket**

Clay bucket with sealing lid to keep clay moist. 20 litre capacity.

Code	Description	Price
5140121	Clay Bucket, 20L	\$26.75



**Abbot's Modelling Clay**

Good quality clays which can be air-dried or kiln-fired.

Code	Description	Price
514220	Abbot's Clay, 20kg	\$32.35
514020	Abbot's Terracotta, 20kg	\$35.35
514010	Abbot's White, 20kg	\$58.15

*Tip: seal porous clay with watered-down PVA glue.*



**Jovi Plastalina Modelling Paste**

A nontoxic modelling material that won't dry out and can be broken down and reused. Sold in 350g packets.

Code	Description	Price
514901	Black, 350g	\$5.20
514910	White, 350g	\$5.20
514920	Red, 350g	\$5.20
514933	Light Blue, 350g	\$5.20
514930	Dark Blue, 350g	\$5.20
514943	Dark Green, 350g	\$5.20
514944	Leaf Green, 350g	\$5.20
514950	Yellow, 350g	\$5.20
514960	Orange, 350g	\$5.20
514970	Violet, 350g	\$5.20
514973	Pink, 350g	\$5.20
514976	Ruby, 350g	\$5.20
514980	Brown, 350g	\$5.20
514987	Terracotta, 350g	\$5.20
514994	Flesh, 350g	\$5.20



**Jovi Air Hardening Paste**

An easy to use compound that smells fresh and has a pleasant feel – does not stain like clay. Air-dry for 24 hours and it's ready to be painted, varnished or cut. 4 years and up. Available in two colours.

Code	Description	Price
514787	Terracotta, 500g	\$5.15
514687	Terracotta, 1kg	\$9.30
514710	White, 500g	\$5.15
514610	White, 1kg	\$9.30



**Sculptamold**

A nontoxic modelling carving and casting compound that combines the best features of clay, plaster and papier maché. Can be carved, sawn, and nailed without chipping. Just add water; sets in 30 minutes.

Code	Description	Price
515001	Sculptamold, 1kg	\$18.50
515010	Sculptamold, 10kg	\$68.95



**Crea-Stone**

Lightweight, stone-like material in powder form for casting or modelling. Dries to a rough granite-like texture.

Code	Description	Price
514502	Crea-Stone, 2Kg	\$39.95



Note: Freight additional charge.

**Plaster of Paris**

Code	Description	Price
514820	Casting Plaster, 20Kg	\$31.95



**Plastic Masks**

Solid moulds which can be cast with clay or plaster, or decorated and painted.

Code	Description	Price
520300	Plastic Mask, White	\$5.40
520400	Female Mask, 21cm	\$10.95
520500	Male Mask, 22cm	\$10.95