A Teaching Pack
provided by
Commercial Clay Ltd
in association with
media content lab
INTRODUCTION

Clay is one of the cheapest and most versatile materials you can use in art and design, and for children it's definitely the most fun. Our clay is non-toxic and also dries naturally in air so there is no need for an expensive kiln.

If you would like to do something a bit different in your art lesson then you can't go far wrong with clay, there are many activities suitable for all ages that can be as simple as making sausages and thumbpots with foundation stage children to older children making musical instruments and using layers to build up a 3D image. Clay really gives children a chance to express their creativity; if they can imagine something then they can create it in clay.

We have compiled a list of simple exercises that can be used as they are or can be easily adapted to fit in with projects and topics you are working on. All the exercises have been designed to meet National Curriculum objectives for Art and Design in Key Stages One and Two and to build coordination and motor skills during the Foundation Stage.

National Curriculum objectives for Art and Design met at **Key Stage 1:**

- Record from imagination and explore ideas.
- Investigate the possibilities of a range of materials and processes.
- Use tools and techniques and apply these to a range of materials and processes.
- Design and make images and artefacts.
- Learn about visual and tactile elements.
- Learn about materials and processes used in art, craft and design.
- Investigate different kinds of art, craft and design.

National Curriculum objectives for Art and Design met at **Key Stage 2:**

- Explore ideas for different purposes.
- Investigate and combine visual and tactile qualities of materials and processes and match these qualities to the purpose of the work.
- Apply experience of materials and processes, including developing control of tools and techniques.
- Design and make images and artefacts.
- Visual and tactile elements, including colour, pattern and texture, line and tone, shape, form and space, and how these elements can be combined and organised for different purposes.
- Materials and processes used in art, craft and design and how these can be matched to ideas and intentions.
- Exploring a range of starting points for practical work.
- Working alone, and collaborating with others, on projects in two and three dimensions and on different scales.
- Using a range of materials and processes.

Further Learning

*In addition to the tasks, further the children's learning by incorporating the following into your lesson. Ask the children to:*

- Look at each others work after each lesson
- Comment on the success of their items
- Explain how they got to the finished product
- Think about improvements they might make next time
GUIDELINES

Surfaces

Clay can be modelled on any hard surface, such as a desk, or on a wooden or plastic board. Whatever surface is used it should always be cleaned down with water at the end of the session.

Storage

Clay should be kept in the sealed bag that it is provided in until it is needed. Once the bag is opened, it should be resealed as well as possible after every use, and kept in a cool, dark place.

Consistency

Clay supplied by Commercial Clay will be the correct consistency to begin modelling with straight out of the sealed bag. However, if the clay has been kept for some time or in the wrong conditions, then the consistency should be checked before use.

To check if the clay is the correct consistency break off a small section and pinch or squeeze it. The material should be soft enough to do so, and if pieces are torn off then they should join back together when pressed with ease, without the use of any other materials such as glue.

If the clay is proving to be too sticky or too hard, then water can be used to manipulate it until it becomes the correct consistency.

Slip/Water

Water can be very useful when modelling with clay for a number of reasons. If the clay is sticking to the surface on which it is being worked, then a little water on the surface or on the hands of the modeller can help to reduce this.

Water can also be used to smooth the clay and to reduce cracks in the item being made.

Mixing water with a little clay can produce what is known as 'slip'. This can be useful for joining pieces of clay together, like glue. Slip can also be coloured by adding colourants and can then be used to paint finished objects to give a pale colour finish.

Drying

Once items have been modelled in clay they take approximately 24 hours to dry naturally (i.e. where a kiln is not being used). Thicker / more solid items will take longer than this.

Once the items have dried they tend to become more brittle, and as such it is advised that they are painted or glazed to give them extra strength.

Cutting

When cutting off sections of clay from the original block, it is best to use a large knife or a length of wire. When cutting out items in rolled clay or modelled shapes, smaller craft knives or ordinary knives can be used.

Tools / Equipment

A vast range of tools and objects can be used to manipulate and decorate clay items, and the key is to use your imagination and try out anything that you think might work.
To manipulate and model the clay you will need a range of objects such as rolling pins, boards, knives, wire, rulers and different shaped items that can be cut around. A spatula is a useful tool as when modelling flat items (such as tiles), the clay tends to stick to the board. When making decorative items pointed objects like pens and pencils are good for making holes through which string can be tied.

To decorate the clay objects any number of tools can be used, from domestic items such as bottle tops, cutlery, shells and buttons, nuts and bolts, to textured materials like sandpaper, lace, leaves etc. Decorative shapes or stickers can be used to stick onto the clay, or items can be stuck in it such as pasta shapes, beads, etc.

In order to paint or colour the clay you can use brushes, stencils, sponges, etc, and a range of poster paints, glazes and colourants (to add to slip).

**Paints / Glazes**

Once the clay is dry, it can be painted. Poster paints are good for painting the clay, and spray paints can also be used to achieve designs with a stencil.

Coloured slip (a mixture of clay, water and a colourant) can also be used to colour the clay. This can be applied when wet or dry.

Items should be glazed once complete (after the clay and any paint is totally dry) where possible. This will strengthen the clay and give it a better look and texture. A number of clay glazes can be purchased in both powder and liquid form, or PVA glue can be used. The advantage of the PVA glue is that it can be mixed with poster paints if desired to give a coloured glaze.
As with many classroom activities, precautions must be taken when using clay. However, as long as the guidelines below are followed then the use of clay with children should be perfectly safe. If using clay for the first time in your school, then it is advisable to get in touch with your education authority, as they may have their own set of guidelines to follow.

- The biggest risk is from inhalation of dust and fumes from clay, glaze or decorating materials such as paint. It is important that any working environment is therefore adequately ventilated in accordance with the COSHH regulations (Control of Substances Hazardous to Health). Your school should already have made provisions for this but if you are unsure then check www.coshh-essentials.org.uk for more information.

- Never eat or drink in the classroom/workshop area.

- Those working with clay, especially children, should wear protective aprons or overalls. These should be cleaned on a regular basis.

- All tools and surfaces used should be washed down after use - mopping and washing with water is better than simply sweeping or dusting. The floor should also be mopped properly after each session. Spillages of clay or slip on the floor may give rise to slippery conditions.

- Children of any age should be supervised at all times when using cutting tools, sharp objects, paints, glazes etc.

- Hands should always be washed after working with clay, or at least before eating or drinking, as clay that dries out on the skin can cause irritation.

- Where possible use ready mixed glazes etc., as mixing them up from scratch can involve the spreading of dust/powder. Check that any products used are safe for use by children.

- Any contamination of the skin and mouth should be washed away with water immediately. If swallowed drink plenty of water. If clay gets into the eyes, wash with water for 15 minutes. Consult medical opinion after eye contact or if there are any ill effects.
Making shapes and textures

This is one of the most basic clay exercises. It explores the basic properties of clay by forming simple shapes and creating textures.

Preparation:

Give each pupil a ball of clay, approximately 5cms in diameter.

You will need:

- Absorbent boards to work on and leave the clay to dry. Wood or MDF (not varnished)
- Domestic items e.g. Plastic knives and forks for trimming, buttons, coffee jar lids
- Pine cones, twigs and leaves
- Shells
- Old pencils etc
- Bowls of water, sponges
- Old biscuit cutters
- Rolling pins

Activity:

1. Prepare clay as instructed and give each child a handful of clay the size of a tennis ball
2. Allow the children to roll the clay into a ball
3. Once you are happy with the consistency get them to break the ball into two
4. Next they should roll the clay into two balls
5. One ball can be rolled on a flat board to create a sausage shape
6. The children should now have a sausage and a ball shape
7. Get the children to take the ball and roll the clay out flat on a board with a rolling pin, make sure the rolling pin is kept wet so it doesn't stick
9. The clay needs to be about 1cm thick
10. The children can now use the old biscuit cutters to cut two different shapes into the rolled out clay
11. Before removing the cutters, a plastic knife can be used to trim the edges away
12. Allow the children to remove the cutters to reveal the two shapes
13. Patterns and textures can be made in the clay shapes e.g. press buttons into clay, make patterns with plastic knives and forks

Textures can be produced on the shapes while still wet, by pressing objects into the clay. Pupils can either create indentations with objects such as buttons, bottle tops or forks, or they can press objects into the clay to be left there as decoration, such as stars, beans, beads etc.
**Thumb Pots**

Clay can be used to make simple pots, for which ceramics facilities are not needed. Pupils will learn how to manipulate the material, and how to decorate them in a number of ways from the simplest methods to more advanced for older pupils.

**Preparation:**

Give each pupil a ball of clay, approximately 5cms in diameter

You will need:

- Absorbent board
- Paints/glazes
- Pencils or other pointed items
- Selection of decorative shapes, such as stars, circles etc
- Rolling pin

**Activity:**

1. The children should start by kneading the clay in their hands. Using their thumbs they should begin to press down in the centre of the clay, rotating it at the same time.

2. The children should continue to use their thumbs to form a dip in the centre of the ball, rotating all the time. Tell the children to keep kneading from the centre of the dip outwards, until all of the sides are of even thickness and there is approximately a 1 - 1.5 cm border to the pot.

3. By dipping their hands into water, or using 'slip' (a mixture of clay and water), the children can smooth the sides of the tumb pot. This will also help to reduce cracking in the pot.

**Painting:**

Once hard, pots can be painted (with paint or coloured slip). Patterns can be painted on with brushes, sprayed on using stencils to achieve clear shapes, or sponged on to the pots. Once the paint is dry, the pots should also be varnished where possible to strengthen them.
Handprint tiles

To explore the texture and shapes clay can take on, hand print tiles are a simple exercise.

Preparation:

Give each pupil a ball of clay, approximately 5cms in diameter

You will need:

- Absorbent board
- Paints/glazes
- Rolling pin

Activity:

1. Once you are happy with the consistency of the clay the children should roll it out flat on a board with a rolling pin, making sure the rolling pin is kept wet so it doesn’t stick
2. The clay should be rolled out until it is about 1cm thick
3. Make sure each child has a surface area big enough for their hand print
4. Get them to firmly press their hands into the clay
5. The pupils should write their name underneath with a plastic knife or old pencil
6. A neat square should be trimmed around each handprint
7. Leave to dry on the board
8. Once dry the pot should be varnished for strength
Numbers, Letters and Words

Numbers, letters and words in clay can be used to aid in learning to form letters, numbers and words, and in practising spelling.

Preparation:

Prepare a ball of clay for each pupil, approximately 5cms in diameter.

You will need:

- Aprons
- Wooden or plastic board

Activity:

1. The children should roll out a small section of the clay in their hands or on a board, so that the clay forms a long thin sausage. The clay can then be shaped on the board or desk into letters and numbers. Ask the class to form the letters in their names, or new words that they have been learning to spell.

2. Pupils could make simple sums for their partners, who could then form the answer using clay.

3. Use this as the basis for further exercises depending upon the level of your class, such as word games.

4. If any of the items produced are to be kept (such as the letters of the pupils names) then the clay items should be left for 24 hours to dry. Glazing the items will produce a stronger finish.

Thumb pots (advanced)

Clay can be used to make simple pots, for which ceramics facilities are not needed. Pupils will learn how to manipulate the material, and how to decorate them in a number of ways from the simplest methods to more advanced for older pupils.

Preparation:

Give each pupil a ball of clay, approximately 5cms in diameter.

You will need:

- Aprons
- Wooden or plastic board
- Domestic items such as bottle tops, forks and buttons
- Paints/glazes
- Decorating slip (clay mixed with water with a colouring agent added)
- Stencils
- Pencils or other pointed items
- Selection of decorative shapes, such as stars, circles etc
- Rolling pin
Activity:

1. Start by getting the children to knead the clay in their hands. Using their thumbs they should begin to press down in the centre of the clay, rotating it as they work.

2. They should continue to use their thumbs to form a dip in the centre of the ball, rotating all the time. Keep them kneading from the centre of the dip outwards, until all of the sides are of even thickness and there is approximately a 1 - 1.5 cm border to the pot.

3. By dipping hands into water, or using 'slip' (a mixture of clay and water), the sides of the thumb pot can be smoothed. This will also help to reduce cracking in the pot.

4. Once the desired shape and size of the thumb pot has been achieved, a number of methods can be used to decorate it, some while the clay is still wet, and some after it has dried. The methods of decoration that you choose will depend on the level of your class.

Textures:
Textures can be produced on the pot while still wet, by pressing objects into the clay. Pupils can either create indentations with objects such as buttons, bottle tops or forks, or they can press objects into the clay to be left there as decoration, such as stars, beans, beads etc.

Layering:
The pot can be decorated by layering it with different shapes, providing that the sides of the pot are quite smooth. By rolling out small sections of clay with the rolling pin and then using cake cutters, stencils etc, or by cutting the clay out freehand with a tool, shapes such as stars, hearts and so on can be created which can then be stuck onto the side of the pot. The shapes can be stuck on using slip, and once the pot is fully dried (after 24 hours) the pot should be glazed to prevent cracking.

Cutting:
If the sides of the pot are quite smooth and strong, then shapes can be cut into the pot in the same way that children cut shapes into the side of a pumpkin at Halloween. The pot should be partially dried before cutting shapes into it.

Sgraffito:
Sgraffito is one of the oldest methods of decorating clay, and involves creating patterns in the clay by using a pointed tool. Different patterns can be achieved by using different tools such as pencils, combs or cutlery. A variety of effects can be achieved if the pot is first painted with a coloured slip, as the 'scratched' pattern will show through as a different colour. Allow the slip to dry before scratching in the pattern, but not the clay.

Painting:
Once hard, pots can be painted (with paint or coloured slip). Patterns can be painted on with brushes, sprayed on using stencils to achieve clear shapes, or sponged on to the pots. Once the paint is dry, the pots should also be varnished where possible to strengthen them.
Tiles (advanced)

Clay can be used to make tiles that can be decorated in a range of styles for a variety of uses. Pupils will begin to understand how clay can be used practically, yet still without the use of ceramics facilities.

Preparation:

Give each pupil a ball of clay, approximately 5 cm in diameter along with a board and a rolling pin. For younger groups you may wish to cut the tiles for each pupil in advance and simply allow them to decorate them.

You will need:

- Aprons
- Wooden or plastic board
- Domestic items such as bottle tops, shells and buttons, nuts and bolts
- Textured materials/items like sandpaper, lace, leaves etc
- Paints/glazes
- Decorating slip (clay mixed with water with a colouring agent added)
- Stencils
- Pencils or other pointed items
- Selection of decorative shapes, such as stars, circles etc
- Rolling pin
- Cutting implements
- Ruler

Activity:

1. The children should flatten the ball of clay as much as possible onto the desk or board and begin to use the rolling pin to roll it out into a flat slab.

2. When the desired thickness of the clay has been achieved (again, 1 - 1.5 cm is a good thickness) the children should measure out the desired size, mark the outline in the clay with a sharp object (such as a pencil) and then cut out the tile using a knife or some cheese wire. A ruler can be used when cutting to achieve a straight line.

3. Once the tile has been produced, pupils can use a range of methods to decorate them as with the thumb pots. The tiles can be used as decorative items for the house or garden.

These can be decorated in a number of ways for example layering the letters made of clay onto the tile (while still wet), or painting their name on using a brush or stencils (when dry).

- The tiles can be decorated by indenting with objects to produce a textured surface, or pressing the objects (such as shells, pasta, beads etc) into the clay to form a pattern or a picture.

- Pictures can be painted into the tiles.

- Patterns can be produced by pressing textured materials into the clay, such as leaves, or lacy fabric.

All tiles should be glazed after they have dried to reduce the chances of them cracking or breaking.
**Coil Pots**

Clay can be used to make simple pots, for which ceramics facilities are not needed. Pupils will learn how to manipulate the material, and how to decorate them in a number of ways from the simplest methods to more advanced for older pupils.

**Preparation:**

Give each pupil 2 medium-sized balls of clay, approximately 5 cm in diameter each.

You will need:

- Aprons
- Wooden or plastic board
- Domestic items such as bottle tops, forks and buttons
- Paints/glazes
- Decorating slip (clay mixed with water with a colouring agent added)
- Stencils
- Pencils or other pointed items
- Selection of decorative shapes, such as stars, circles etc
- Rolling pin
- Small object with a circular base, such as a plastic beaker
- Flat object such as a piece of card or a ruler

**Activity:**

1. The children should take one ball of clay and begin to flatten it with their hands on the desk or board. Then roll the clay out with the rolling pin until it is approximately 0.5 - 1 cm thick.

2. Give the children an object with a circular base, such as a plastic beaker, and placing it on the clay, ask them to cut around the outside so that they are left with the circular base for the pot.

3. The children should now take the second ball of clay, and using the palms of their hands, roll into a long, thin sausage as shown. They may find it is easier to start rolling the sausage in their hands and then continue on the board.

4. Attach one end of the sausage to the base and then begin to coil it around the edge to produce the sides of the pot as shown in the diagram. The sides can be built up from either one very long sausage or a number of shorter ones.

5. The pupils should continue coiling until the sides of the pot are of the desired height.

6. The sides of the pot should be smoothed, either by hand using a small amount of slip, or with a flat object such as some card or a ruler, etc.

7. The coil pot can then be decorated in any number of ways, as with the thumb pots. See the thumb pot (advanced) exercises.
Favourite meal

Pupils can make their favourite meal/food out of clay. This exercise will not only fuel their imagination, but will allow pupils to practice manipulating the medium and will improve on their modelling skills.

Preparation:

Give each pupil a large ball of clay, approximately 10 cm in diametre.

You will need:

- Aprons
- Wooden or plastic board
- Pens and paper
- Domestic items such as bottle tops, forks and buttons
- Textured materials
- Paints/glazes
- Pencils or other pointed items
- Rolling pin

Activity:

1. Pupils should decide on what their favourite meal is. It is helpful if they firstly draw a picture of the meal, so that they can more easily visualise what they will be making.

2. The method of producing the items of food will vary depending on what the pupils have decided to make. Largely the food can be modelled by hand, but a rolling pin and board may be needed for some items (for example, bacon, lettuce, etc).

3. When the basic shape of the food has been formed, textures can be added to make them look more realistic. For example, the Sgraffito method could be used to put stripes down a rasher of streaky bacon, or a pencil could be used to put indents into the top of a burger bun to look like seeds.

4. After the clay has dried then the food can be painted. It is best to use a brush for this activity as a more precise finish can be achieved on the food. If the food is to be kept by the pupils and taken home then it should be glazed.
Getting the children to make and play a musical shaker is a great way of stirring an interest in both music and handicraft.

Preparation:

Give each pupil a large ball of clay, approximately 10 cm in diameter.

You will need:

- Cardboard tubes
- Newspaper
- A rolling pin
- Paper
- Elastic band
- Sticky tape
- Dried peas/rice/lentils
- A tool for cutting clay
- Poster paint

Activity:

1. The children should loosely wrap the cardboard tube in newspaper and use sticky tape to hold it in place.

2. Next, they need to wrap a A5 sized slab of clay around the tube so that the ends overlap and using their fingers press down so that the two sides join. The cutting tool can be used to remove any excess clay.

3. Using a rolling pin the children can reshape the excess clay removed earlier into a flat circle so that it is big enough to cover the gap at the top of the clay cylinder.

4. Using their hands they need to seal the excess clay over the gap at the top of the cylinder and cut away any excess.

5. Leave to dry overnight and then remove the cardboard and newspaper.

6. The musical shaker should have dried to a stone like texture and will now be suitable for painting.

7. Allow the children to pour the rice or peas into the shaker until it is 2-3cm deep (different children can be given different dried items and fill their shakers to varying depths to produce a variety of musical tones).

8. The paper should be cut into 10cm circles and secured tightly over the open end of the shaker using an elastic band.
Layered House Tile

This exercise allows children to use layers of clay to build up an image of the house they live in.

**Preparation:**

Give each child a 10cm ball of clay.

You will need:

- A tool for cutting and marking clay
- Poster paint
- A rolling pin

**Activity:**

1. The children should roll the clay flat and cut it into two rectangular slabs. One of these will form the base of the tile. The other will be used to develop the features of the house.

2. The children should take the first tile and cut it so that it forms the basic shape of a 2D house.

3. From the other tile, they should cut shapes such as doors, windows and fences that will form the upper layers of the tile. These can then be pressed firmly on to the house tile so that they stick.

4. After drying for 24 hours the tile will be ready for painting.

Pen Pot

Making pen pots with the children is a great way of getting them to design and produce a unique artefact that is both fun and practical.

**Preparation:**

Give each child a 10cm ball of clay.

You will need:

- Cardboard tubes
- Newspaper
- A rolling pin
- Sticky tape
- A tool for cutting clay
- Poster paint
**Activity:**

1. As with the musical shaker, the children should loosely wrap the cardboard tube in newspaper and use sticky tape to hold it in place.

2. Next they need to wrap a A5 sized slabs of clay around the tube so that the ends overlap and using their fingers press down so that the two sides join. The cutting tool can be used to remove any excess clay.

3. Using their rolling pins the children should reshape the excess clay removed earlier into a flat circle so that it is big enough to cover the gap at the top of the clay cylinder.

4. Using their hands, the children need to seal the clay circle over the gap at the top of the cylinder and cut away any excess.

5. Leave to dry overnight and then remove the cardboard and newspaper.

6. The pen pot should have dried to a stone like texture and will now be suitable for painting in any style the children choose.

---

**Christmas Decorations**

There is nothing children love more than the build up to Christmas and this fun exercise really gives them the chance to be creative.

**Preparation:**

Give each child a 5cm ball of clay.

You will need:

- A tool for cutting and marking clay
- Poster paint
- Glue
- Glitter/sweets/other items that can be stuck on to make decoration interesting
- An old pencil
- String
- Christmas shaped templates or cutters (optional)
- A rolling pin

**Activity:**

1. After rolling the clay flat, the children should cut the required shape (e.g. Santa, snowman, Christmas tree) from the clay using cutters, a template or by cutting freehand.

2. They should use their tool to press designs into the clay (pine needles for trees, clothing for Santa etc).
3. Ask the children to take a pencil and make a hole for the string to go through by pushing through the clay approximately 0.5cm from the top of the decoration. Do not make the hole too big as the decoration can break if there is not a wide enough bridge of clay left across the top.

4. After leaving the clay to dry overnight the children can decorate with poster paints.

5. Give the children glue to stick glitter, sweets and other items onto the decoration, giving it a more interesting texture and 3D look. An orange smartie for a snowman's nose and glitter for tinsel on a Christmas tree both work well but let the children use their imagination with this and you are sure to get some interesting ideas!

6. When the paint and glue are dry the string can be looped through the hole made earlier and secured with a tight knot.

7. Hang the finished decorations on the Christmas tree!

**Self-portrait**

This is a great opportunity for children to start to learn how to recreate and correctly proportion human features and it's much more fun than working in 2D.

**Preparation:**

Give each of the children a 10cm ball of clay.

You will need:

- A tool for cutting and marking clay
- Poster paint
- A mirror
- A small plate or saucer
- Glue
- A ball of wool
- A rolling pin

**Activity:**

1. After rolling the clay flat, tell the children to take their plate and use it as a template to cut a circle from the clay. This will form the head on which they can then create their self-portrait.

2. There should still be plenty of clay left from the cutoff. This can be used to create facial features like eyes, noses and mouths. Make sure the children press these features firmly onto the face using slip so that they will stick even when the clay is dry.

3. Leave the clay to dry overnight so that it can be painted.

4. For the final touch of realism, the children can recreate their own hairstyle by gluing bits of wool to their portrait.
Bedroom Name plaque

Children will love the chance to make a bedroom name plaque that they can take home and keep.

Preparation:

Give each child a ball of clay with a 5-10 cm diameter.

You will need:

- A tool for cutting and shaping clay
- Poster paint
- A rolling pin

Activity:

1. The children should roll the ball flat and cut into a rectangular strip, ensuring they have saved enough clay to make the letters.

2. Next, the children should roll these pieces into sausages and shape them to form the letters of their names.

3. Make sure they firmly press the letters onto the plaque so that they stick even when the clay is dry.

4. If you want the children to add other effects to the plaque such as sgraffito they should do this now as pushing letters onto the clay would spoil any effects made earlier. If you want to make it easier for the plaques to be mounted, the children need to push some holes into the clay using the tip of a pencil.

5. Wait 24 hours for the clay to dry and then paint in the style of choice.