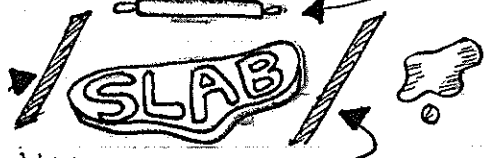


# MASTER CLASS: POTTERY

## CLAY

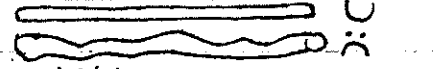
### WORD BANK

A **SLAB** IS A FLAT PIECE OF CLAY MADE WITH YOUR HANDS OR WITH A ROLLING PIN

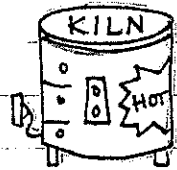
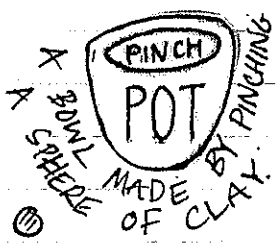


**GUIDES** ARE WOODEN STICKS USED WHEN ROLLING OUT A SLAB OF CLAY TO MAKE THE THICKNESS EVEN.

### COIL



A **COIL** IS A LONG, THIN ROPE OF CLAY MADE BY ROLLING WITH YOUR HANDS  
\*TRY TO MAKE IT AN EVEN THICKNESS.



THE **KILN** IS A SPECIAL OVEN THAT GETS SUPER HOT, TO TURN CLAY INTO A CERAMIC

**FIRING** IS THE PROCESS OF COOKING THE CLAY.

### SCORE



AND **SCORE** JOINING WET CLAY IS DONE BY

**SCORING** OR ROUGHLY SCRATCHING AND ADDING LIQUID CLAY, CALLED **SLIP**. THIS SEALS THE PIECES TOGETHER.

**CERAMIC** IS THE WORD FOR FIRED CLAY

- PLASTIC
- LEATHER HARD
- BONE DRY
- BISQUEWARE
- GLAZEWARE

Fresh out of the bag, Clay is soft. Can be shaped into anything.

Clay is firm and cold to the touch. Cannot be shaped anymore, but can be carved into.

The clay is no longer cool to the touch and is ready to be fired.

Ceramics that have been fired once through the kiln. The color is bright white.

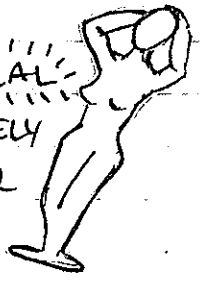
Finished ceramics that have been fired twice through the kiln. Coated in glaze.



**FUNCTIONAL WARE** ARE PIECES MADE FOR A PURPOSE  
EG. MUGS, JUGS, TEAPOTS



**NON-FUNCTIONAL WARE** IS PURELY DECORATIVE OR SCULPTURAL



## Introduction

Pottery is made from clay often found around riverbeds and dams. Clay is a malleable material that can be manipulated to almost any shape or form and is ideal for functional ware. It can be fired to a high temperature, where it goes through an irreversible chemical change and becomes ceramic — a hard, solid, watertight and heat-resistant material.



### WHAT IS CLAY?

Clay is found within the Earth's crust. Clay has evolved from granite-type igneous rocks which have been decomposed by nature over millions of years.

# THINGS TO KNOW

## DIFFERENT TYPES OF CLAY

Four different types of clay are used for pottery construction.

1. Earthenware is an all-purpose, low temperature firing clay. It is usually light brown or white in colour and is normally fired to between 700°C and 1200°C.
2. Terracotta is another low temperature, all-purpose clay, which is red-orange in colour. Terracotta is usually fired to a temperature similar to earthenware.
3. Stoneware is a traditional, strong, high firing clay that usually ranges in colour from light brown to grey. Stoneware is normally-fired to approximately 1200°C to 1300°C.
4. Porcelain is a fine-grain, soft, white clay. It is generally fired to very high temperatures of approximately 1300°C to 1400°C.

## STAGES IN MAKING A FORM OUT OF CLAY

1. Design the form.
2. Prepare the clay.
3. Make the form.
4. Decorate the form.
5. Completely dry out the form.
6. Bisque fire the form in the kiln.
7. Apply decoration and glaze the form.
8. Fire the form again to glaze temperature.

*Note:* It is possible when constructing certain objects out of clay to fire them only once.

## Important facts about clay

- Clay will dry out when exposed to air, therefore, it is important to cover it in plastic.
- Clay forms will generally shrink about one-eighth from the start of construction to the completion of the final firing. This is due to the evaporation of moisture in the clay.
- If air bubbles are trapped in the walls of your pottery, they will expand when fired and cause your form to crack severely or even explode. It is therefore important to check your clay for air bubbles prior to construction.
- Clay becomes very brittle and fragile when dried and before it is fired. It is therefore important you handle it very carefully at this stage.
- When you have made a form out of clay it should be dried out as slowly as possible to prevent cracking.
- When the form you are making has dried out it is very difficult, if not impossible, to continue building on it. This is because the form has already begun to shrink and any added clay will dry and shrink at a different rate, which will result in cracking.
- If cracking does occur during drying, the best way to attempt to fix the crack is to use vinegar mixed with a dry clay powder.
- When constructing a clay object, it is always important to keep the thickness as even as possible. It will then dry evenly and this will help to prevent cracking.
- Clay will stick to a shiny or wet surface, so it is best to work on a dry, slightly textured board.

## Adding a piece of clay to another

When constructing a ceramic form, you must use the correct technique to join additional clay. If you don't use the correct method, the clay can very easily come apart or crack when it is dried or fired.

The two pieces of clay being joined should contain approximately the same amount of moisture. Damp clay should not be joined to dry clay because the dry clay has already begun to shrink. When the damp clay dries and shrinks it will crack.

To successfully join two pieces of clay together you need to create a textured surface on each of the pieces. Use a tool to create scratch marks on both surfaces, then add slurry or slip (watered-down clay) to both surfaces. The slurry/slip will act as a glue to adhere both surfaces to one another. When the pieces are joined, you can compress the two surfaces together using a tool or your finger.



# COILING TECHNIQUE



ALLOWS FOR CONTROL OF THE WALLS, AS THEY ARE BUILT UP TO MAKE THE VESSEL LOOK BIGGER AND BULGE OUTWARD OR NARROW INWARD WITH LESS DANGER OF COLLAPSING

1. DESIGN SHAPE. DECIDE IF WANT COIL BASE OR SLAB BASE



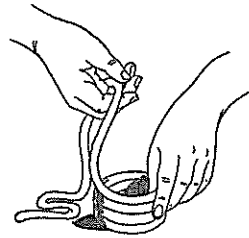
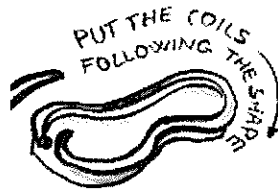
OR



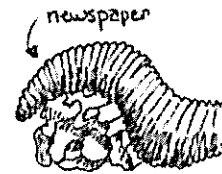
2. ROLL COILS



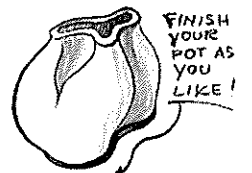
3.



4. USE NEWSPAPER FOR TEMPORARY SUPPORT



5. SMOOTH FINISH



OR



## TIPS AND TRICKS...



ABSTRACTS

If my coil gets too thin and weak, I can repair (fix) it. I do not ball it up and start over. Balling up my clay will make it harder to work with because it will be dry and cracked.

I break it at the weak spot, overlap it and smooth it until it is whole again.

- COILING IS GOOD FOR MAKING CYLINDERS AND ROUNDS SHAPES WITH SOFT FEATURE
- CAN USE DIFFERENT TYPES OF COILS IN CONTRUCTION

# SLAB BUILDING TECHNIQUE



ALLOWS FORMS TO BE MADE WITH SHARP CORNERS OR WITH SMOOTH CURVES

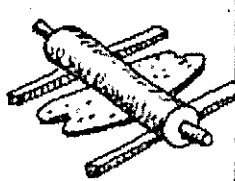
1. DESIGN AND CUT OUT PATTERN



\*FOR HARD SLAB- LET IT DRY UNTIL LEATHER HARD



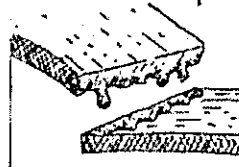
2. ROLL OUT SLAB WITH ROLLING PIN AND GUIDES



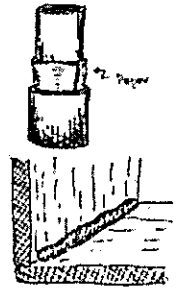
3. CUT CLAY WITH KNIFE



4. SCORER AND USE SLIP TO JOIN PARTS



5. CONSTRUCT FORM WITH HELP OF PAPER AND ADD EXTRA BEAD OF CLAY ALONG JOINT



## TIPS AND TRICKS...

## AESTHETICS



- LARGE FLAT SURFACES FOR DECORATION
- CAN BE SELF SUPPORTING ALLOWS FOR COMPLEX FORMS TO BE CREATED






SOFT SLAB (THE CLAY IS STILL WET) ALLOWS FOR SMOOTH CURVES, BENDS, FOLDS AND EDGES. WITH SLIP, FINELY EXECUTED JOINTS AND ATTACHMENTS MAY BE ACCOMPLISHED CAREFUL PLANNING FOR MINIMUM HANDLING WILL PRODUCE A CLEAN FORM

HARD SLAB (THE CLAY IS LEATHER HARD) IS GOOD FOR MAKING GEOMETRIC SHAPES (CIRCLES, TRIANGLES, SQUARES, RECTANGLES).

# PINCH TECHNIQUE



ALLOWS FOR SIMPLE CLAY VESSELS SUCH AS BOWLS AND CUPS OF VARIOUS SIZES TO BE FORMED AND SHAPED BY HAND USING A METHODOICAL PINCHING

<p>1. ROLL A BALL OF CLAY</p> 	<p>2. PUSH THUMB INTO THE CENTRE OF THE BALL</p> 	<p>3. SLOWLY PINCH, ROTATING AS PRESSING TO THE BOTTOM</p> 	<p>4. GENTLY PINCH TO WIDEN THE POT. KEEP EVEN PRESSURE</p> 	<p>5. FLATTEN THE BOTTOM BY GENTLY PRESSING AGAINST SMOOTH SURFACE</p> 
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## TIPS AND TRICKS...

- DON'T OVER ROLL THE CLAY BECAUSE IT CAUSES DRYING AND CRACKING WHICH CAN MAKE IT DIFFICULT TO WORK WITH

## AESTHETICS



CAN BE MADE TO SHOW THE ARTIST'S MARKINGS OR WITH REFINEMENT SO IT LOOKS SMOOTH