

STUDENT HANDBOOK
5707 Smith Ave.
Baltimore MD 21209

410.578.1919 x210
www.baltimoreclayworks.org

Chapter 1

Introduction to Baltimore Clayworks

Welcome to Baltimore Clayworks! Baltimore Clayworks is a neighborhood-based not-for-profit ceramic art center with a national reputation for artistic excellence, artists' support, and community involvement. Baltimore Clayworks is a 501(c)3 non-profit

The mission of Baltimore Clayworks is to develop sustain, and promote an artist-centered community that provides outstanding educational, artistic, and collaborative programs in the ceramic arts.

Location

Clayworks is housed in two historic buildings located in the northwest corner of Baltimore City. A former Carnegie library, built in 1919 and the continuing home of Clayworks for the past 20 years, houses studios, kilns and classrooms. A former convent, built in 1878 and donated by The St. Paul Companies to Baltimore Clayworks in 1999, opened in September 2000 and currently houses galleries, meeting space, and offices.

History

The center was founded in 1978 by nine potters and ceramic sculptors who sought to establish a center for artists, students, and the public to experience and learn about clay. Clayworks' founders came together in the art department of Towson State University as students, technicians, and adjunct faculty and began to search for a collective space to work in clay, teach and exhibit. In 1978, a committee of Mt. Washington citizens chose Baltimore Clayworks from a field of applicants to purchase the old Enoch Pratt Library from Baltimore City. After renovating the building, adding a mezzanine and kiln house, Clayworks opened its doors in November 1980. In 1999, The St. Paul Companies donated a piece of property called "The Provincial House" to Baltimore Clayworks, which opened in September 2000 as Baltimore Clayworks Gallery Building. In October 2003 we had the groundbreaking ceremony to celebrate the beginning of the addition to our studio building. We have just completed a 7,400 sq. foot addition to our studio and classroom space that will be the envy of the ceramic world.

Community Arts at Baltimore Clayworks

Baltimore Clayworks provides opportunities for trained artists to connect with our community! The board, staff and artists of Clayworks believe it is vital to the mission to make hands-on arts programming accessible to all, especially to individuals with little or no access to the arts. This is accomplished through our multi-faceted community arts program in a number of different and exciting paradigms that Clayworks has developed and evolved over the years.

This community engagement began in 1985, when Clayworks began hosting nationally and internationally acclaimed artists through the “artists in communities” grant from the Mid Atlantic Arts Foundation. This program enables Baltimore Clayworks to host artists for a three to six month residency during which they have studio space to develop their own studio work, as well as the opportunities to engage local communities in arts projects and programs. This program enriches the entire organization, creating opportunities for the other resident artists, students, staff, board and supporters to learn and exchange ideas.

To carry out its mission and live its values, Baltimore Clayworks operates four programmatic areas:

Community Arts - Community arts is a signature program of Baltimore Clayworks and has been for more than eighteen years. Through this initiative, Clayworks conducts arts activities beyond its doors, developing collaborations with grassroots and cultural organizations, schools and public agencies, to connect artists with individuals of marginalized communities of Baltimore and providing access to quality hands-on arts programming.

Educational programs - Provide hands-on studio classes in all aspects of pottery, clay sculpture, and ceramic processes for children and adults; workshops for practicing professional clay artists and advanced students offered by artists of national reputation; slide lectures and other activities for the general public, and internships for college

Artist Residencies and Fellowships – Provide a dynamic artist centered community which fosters artistic growth and professional development for Artists from around the globe.

Exhibitions - Presentations of local, national, and international ceramic artists' work, both in our Exhibitions Gallery and at off-site locales; exhibitions may be juried, invitational, or curated. Shop and Community Arts Gallery.

Chapter 2

How to Contact Us! Dial 410.578.1919 followed by the extension

Executive Director Cyndi Wish - extension 213
cyndi.wish@baltimoreclayworks.org

Finance Director Candace Mitchell —extension 212
candace.mitchell@baltimoreclayworks.org

Development Associate – Merina Casa – extension 217
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Gallery Associate – Hannah & Isolina – extension 210
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Exhibitions – Mary Cloonan – extension 223
Mary.cloonan@baltimoreclayworks.org

Community Arts Department – Nicole Fall – x222
Nicole.fall@baltimoreclayworks.org

Education Associate and Artist Program Coordinator Kevin Rodhe - extension 219
Kevin.Rohde@baltimoreclayworks.org

Education Coordinator Matt Hyleck - extension 220
Matt.hyleck@baltimoreclayworks.org

Matt is your contact for any questions your instructor is unable to answer.
Office hours M, Th, Fri 9:00am-3:00pm or by appointment

Facilities Manager/Technician Samuel Wallace
Samuel Wallace is our technician and facilitates all kiln firing and repair. Please make his job easier by following the instructions on the firing system and by glazing your pieces properly.

Marketing & Graphics – Sara Morales-Morgan – extension 211
Sara.morales-morgan@baltimoreclayworks.org

Chapter 3

Classroom Policies

We are happy that you have chosen to spend part of your time working in CLAY here at Clayworks. Observing a few studio routines will contribute to your enjoyment of the class and of Clayworks.

The Baltimore Clayworks office/gallery building is open:

- Monday – CLOSED
- Tuesday - Friday, 10:00AM — 5:00PM
- Saturday & Sunday, 10:00AM - 5:00PM

The Baltimore Clayworks classrooms are open during administrative hours and while classes are in session, 10am-1pm and 6:30-9:30pm in the weekday plus Sunday class hours 11am-2pm and 6-9pm.

Please be on time to class.

The supply store will be available just before class and for the first half-hour into class for night classes and for day classes, you can pay for supplies and firing at the new front desk across the street in the gallery building, your instructor may have a “demo” early in the class ... you don't want to miss any of this!

If you are planning to miss any classes, please let your instructor know.

If you miss a second consecutive class, please call Clayworks between 10am and 4pm and let the education staff know that you will be absent, and we will notify your teacher.

Please make sure we have your current email address

We have found this to be the best method of communication with our students. We will inform you of firing dates, events, exhibition opportunities, news, etc...)

Inclement Weather Closing policy

Baltimore Clayworks follows the Baltimore City Schools SNOW closings.

If Baltimore City Schools close at noon, afternoon classes are canceled and we ask all evening students to:

Call after 4pm for evening open/close message

**Closings due to snow and ice only. Must be ALL city schools*

Fire Safety

In the event of a fire within the classroom building, please exit the building at the nearest exit. The building fire alarm automatically dials 911 and a phone call will be placed to verify the alarm. **Fire Extinguishers** should be used for their intended purpose only and should not be removed from their designated locations. An extinguisher is located next to each exit. You may use an extinguisher to prevent the spread of fire once the fire department has been notified.

Fire Doors and Windows

Keep all fire and smoke doors closed. These metal doors prevent the spread of smoke or fire, minimizing damage and risk of personal injury in the event of a fire. Once the location of a fire has been determined all doors/windows adjacent to the area at risk should remain closed.

Evacuation Procedures

Take all personal belongings (purse, phone, coat) with you before exiting the building. Walk directly towards the nearest exterior exit door, do not use the elevator. Once outside of the building please meet across the street at the 5707 Smith Ave. building for a roll call with your class to ensure all students are present and accounted by your instructor. Do not attempt to reenter the premise until you have received clearance from our staff/instructor.

Studio access outside of scheduled class times

Access to the Clayworks classroom is provided to all adult students to pursue their individual class work outside of class time. This is offered to all students currently enrolled in our 6 or 12 week courses and space is first-come, first serve. Studio access is restricted to Clayworks hours of operation. Individual classroom schedules may be found on the dry-erase boards posted in each classroom, at the Clayworks website under "Classroom Policies" or on the inside cover of the current newsletter.

Studio access may be preempted for special presentations, workshops or due to scheduling changes; these changes will be posted on the individual dry-erase bulletin boards in the classroom.

Students working outside of class time are asked to sign in/out on the clipboard located in the main lobby entrance.

No students are permitted to remain unaccompanied in the studio building after closing hours. Students must be accompanied by a Clayworks staff member, teacher or resident artist in order to work after hours.

Library

The BC Library is a tremendous resource for students which offers a selection of textbook publications (current and out-of-print) and periodicals on contemporary and historical ceramics as well as technical instruction. The library is a lending library and all sign outs must be made at the 5707 Gallery front desk.

Locker Usage & Security

Please do not leave valuable personal items unattended in the classrooms. Our doors are open during the daytime and during evening classes but we cannot guarantee these items will be safe. Please place purses, wallets, cell phones and car keys in a classroom locker while working in the classroom. Students should provide their own padlock. Lockers are not for overnight storage of tools/materials.

Cell Phones

Please turn off or switch to vibrate all cell phones or pagers when you enter the building.

Parking

- Metered parking is available along Smith Ave. (free Sunday or weekdays after 6PM)
- The Clayworks Gallery Lot located between the 5707 Gallery building and the Light rail lot (look for the 4 hour blue meters) and the meter maids are very strict! Beware!

Basics The duration of most [WINTER](#) classes are 6 to 8 weeks, most [SPRING](#) and [FALL](#) classes are 8 to 12 weeks, and most [SUMMER](#) classes are 8 weeks. Tuition for each class includes: 25 pounds of clay, bisque firing. Students age 16 and up are welcome to enroll in any adult classes or workshops.

You must be paid in full to guarantee a space is reserved for you in the class or workshop.

100% of payment will be refunded if notice is given 2 weeks prior to 1st class

50% of payment will be refunded prior to the 2nd class session

Transfers made less than 2 weeks prior to 1st class will be charged a \$20 administrative fee.

No refunds or application of fees to future classes after 2nd class. There will be no refunds or application of fees issued for 1-day or 2-day workshop for cancellation notification received on or after the scheduled event date.

Transfers made less than 2 weeks prior to 1st class will be charged a \$20 administrative fee.

No refunds or application of fees to future classes after 2nd class. There will be no refunds or application of fees issued for 1-day or 2-day workshop for cancellation notification received on or after the scheduled event date.

We reserve the right to cancel classes if the maximum enrollment is not reached.

Full tuition will be returned if the class is not conducted.

Students may access classrooms outside of scheduled class time during published office hours or while we have evening classes in session. Students working outside of class time are asked to sign-in/sign-out at the main Smith Ave. entrance.

Missed classes are nonrefundable.

Studio closings due to inclement weather will be rescheduled. All inclement weather related closings are based on the Baltimore City Schools schedule. Postponed classes by Baltimore Clayworks due to inclement weather will be added to the end of our printed session.

We recommend all first-time students purchase a basic pottery tool kit (PTK) with their registration, \$24.00 plus tax.

Glaze fees for weekly adult courses are an additional cost of 6 cents (.06) per cubic inch or bulk rate at 4 cents (.04) after 1200 cubic inches.

Chapter 4

Know Your Clay

Earthenware (cone ^04)

- **#104 Red Low Fire** WA/Grog cone 06-2 Good for large sculpture, slab or wheel work. Grog helps reduce warping and shrinkage.
- **#417** cone 06-02 A beautiful smooth red earthenware popular for majolica ware.

Stoneware (cone ^10)

- **#768 Stoneware** cone 6-10 Soft warm beige/gray brown in reduction. Throws well, strong and versatile with excellent thermal shock properties.
- **#182 Stoneware** cone 6-10 Near white plastic stoneware. Good for use with bright glazes. Available with or without fine grog.
- **#470 Stoneware** cone 7-10 A light colored stoneware sensitive to flashing in salt and wood kilns.
- **Orangestone** cone 7-10 Highwater's darkest reduction stoneware. Contains 9% fine mullite. *Not to be used for single-side glaze ware at cone 10.*
- **B-Mix 10** cone 10 A smooth clay, easy to throw and form. Grey-white in reduction, lighter in oxidation.

Porcelain (cone ^10)

- **#130 Porcelain Clay** cone 7-9 An excellent plastic body with the wet strength capabilities of stoneware. Fires white in reduction or oxidation.
- **Helios Porcelain** cone 7-11 A very bright, grolleg porcelain that throws well. Translucent when thin.
- **#257 Grolleg Porcelain** cone 8-10 A porcelain body with a parian-like quality. Translucent well thin. Contains no ball clay.

Mid-Range Clay (cone ^2—6)

- **#365 Porcelain Clay** cone 4-6 A very bright, grolleg porcelain that throws well. Translucent when thin. Oxidation only.
- **#509 Clay** cone 04—6 An open, off-white body designed to withstand demands of hand-building – not ideal for throwing. Oxidation only.
- **Little Loafers cone 6** A smooth clay, easy to throw and form. Warm white in oxidation.

The majority of ceramic materials used in the Pottery are safe if handled correctly. However, over-exposure to any materials, through lungs, skin or mouth, can be harmful. At the Pottery, the most common hazard is airborne clay dust, which can cause silicosis and other serious lung damage. In addition, many metal oxides and metal compounds used in glazes are poisonous in their raw forms.

A complete MSDS (material safety data sheets) binder is available in our glaze lab or visit <http://www.standardceramic.com>

1. Never sand or scrape bone-dry clay or glaze inside the studio. If you need to sand a piece, please do so outside in the garden, and wear a particle mask. Be sure to clean up sanding dust afterwards with a wet sponge, or by sanding over a bucket of water.
2. Clean up spills and clay trimmings before they dry. Clean all surfaces by wiping with a wet sponge – never with a dry paper towel or broom!
3. Clean up THOROUGHLY after yourself in the studio, including the floor around your work area, when you are done working.
4. Clean all bats and boards with a damp sponge after you use them.
5. Students are REQUIRED to wear a particle mask when using the spray booth or chemical room.
6. It is strongly recommended that students use gloves when handling raw glaze materials and washes, especially those which contain heavy metals such as copper, cobalt and manganese. Disposable gloves and masks are available for sale in the Liaison office.
7. Please DO NOT pour excess slip or glaze down the drains. They are pollutants and cause drainage problems. The studio staff can advise where to dispose of contaminated glazes.
8. Always wash hands thoroughly handling glaze or clay ingredients.
9. Do not eat, drink or smoke while working with dry chemicals.

Chapter 5

Clean Up

PLEASE: CLEAN BEFORE YOU LEAVE
Leave it the Way YOU LIKE to See It!!

CHECKLIST:

- Your Wheel - Turn OFF, clean top, sides, splash pans & surrounding table
- Your Table Space - wipe clean before leaving
- Your Chair - push it in or place it on top of table
- Your stool - place it on top of your wheel
- Your Bats & Boards - scrape/wipe clean
- The Wedging Table - sponge clean
- The Floor - sweep or sponge all trimming/spills
- The Glaze Room - Tabletop, floor, everything lidded, wiped & in place
- The Sink Area
- Food - remove all leftovers or discard

The most important contribution you can make to communal safety and health at the Clayworks is to maintain a clean and tidy studio.

Chapter 6

Finishing Your Work

How do you begin to glaze clay pieces?

Length x Width x Height = cubic inch measurement using classroom measuring cube.

Maryland state law requires that we charge 6% sales tax on all firing fees.

Glaze firing fee = .06 per cubic inch (.04 bulk rate at 1200 cubic)

Daytime students may pay all firing fees at the gallery front desk (5707 Smith Ave. across the street from the studio building).

Evening students may pay by check/or CC to instructor and receive 1 paid slip for each piece. No work will be fired without a record of payment for each pot being fired. This means EVERY glazed pot must be accompanied by a PAID slip

^10 REDUCTION 101:

Gas reduction firing uses either natural gas or propane as fuel. Cone 10 reduction temperatures may exceed 2300F.

Gas is a combustible fuel which allows the potter to control the oxygen to gas ratio during the firing. Depriving the kiln of oxygen creates an atmosphere known as “reduction” which produces carbon monoxide—this atmosphere is only produced in fuel fired kilns (gas & wood).

It is specifically the burning of chemically combined oxygen in the clay and glaze minerals that gives reduction fired pottery its distinct and unique characteristics.

Do You Know Which Wax to Use?

- **White wax**- for bisque ware only! ALL bottoms of pots and lid seats, unless YOUR Teacher specifies otherwise!
- **Aftosa wax** (Green Wax)- for glaze resist only! Its the only wax that sticks to glaze already applied to bisque ware.
- **Alumina wax** (ADVANCED STUDENTS ONLY)- wax with alumina hydrate (i.e. kiln wash), for use on porcelain lid seats and for atmospheric firings only!

Your ^10 Reduction Pots: Start to Finish

1. Then you put it on the shelf (labeled “*greenware*”) to be *bisque* fired. Once it is bone dry it will be fired to a low temperature (cone 08 or 1800 F) and then placed on the “bisque” shelves. (1-2 week lag time) Note: thicker pieces will take longer to dry! The *Bisque firing fee is included with your class registration.*
2. If your piece is to be glaze fired, you have to measure your piece in cubic inches (length x width x height) and multiply that # by .06 cents. This is how you establish the cost to finish fire your piece. If your piece(s) total more than 1200 cubic inches, the price is .04 cents. Once you have established a cost total multiply by .06% MD sales tax. Measure all work first to establish your total cubic measurement—hopefully you reach or exceed bulk totals.
3. Students are asked to place one PAID slip for each work to be fired. Sam will NOT load

pots that are not accompanied with a record of payment

- Once your piece is receipted, place ^10 work on the **red** shelf that is inside the gas kiln room, against the wall.
- The **red** shelf **MUST BE FULL** before the kiln can be loaded.
- Your pieces will be out of the kiln within 5 days of the firing. All finished work can be collected on the green shelving in the gas kiln room. Finished glaze work will be unloaded on to the folding tables and mobile cart in this gas kiln room.
- ^10 gas firing takes approximately 18 hours to reach temperature followed by a minimum of 72 hours cooling. Please be patient with the process.

Baltimore Clayworks ^10 Reduction (stoneware / porcelain) Glazes

Val's Satin Black	Matte Clear	Turquoise Matte
Temoku	VC Clear	Sonya's Blue
Tomato Red	Glossy White	Wensu Blue
Easy Copper Red	1234 Celadon	Chun's Blue
Orange to White Shino	Yellow Satin	Mint Satin Green
Malcolm Davis Shino	Haystack Yellow/Brown	Reitz Green
Randi's Green		

Baltimore Clayworks ^6 Oxidation (stoneware / porcelain) Glazes

Wollastonite Clear	Dixon Satin	Wollastonite Black
Blue Hair's Fur	Blue Turquoise	Chun Light Green
Floating Blue	Nutmeg	Red-Pink-Purple-Mauve
Spearmint	Wedgewood Blue	Blue/Green Copper
Majolica White		

Baltimore Clayworks ^04 Oxidation (earthenware) Glazes

Amy's White	Arbuckle Majolica	Nick's Clear
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The GLAZING process:

Wash your hands before handling bisqueware. Oil or dirt from your hands can form a glaze resist on the bisque surface. Wash your pots thoroughly! I rinse my pots by dunking in a large bucket of clean water or by running them under the faucet. Do NOT just wipe the surface with a sponge; this will drag and smear surface grime, increasing your chance of glaze crawl. Once you have washed the pots you may begin the wax process, let them air dry while the wax is drying – at least 1 hour before applying glaze, better to wait overnight. Wax all areas that will touch the kiln shelf (foot) or touch one another (lid seats/rims). Wax at least 1/8" to 1/4" up from the base of the pot to avoid runs (if you place a pencil on its side with the tip touching the base of the pot and rotate the piece you will create a good guide line to follow with your wax brush).

When glazing it is good to have ready:

- 1 bucket of clean water
- 1 small sponge
- stir sticks (1 per glaze)
- 8 oz. containers for pouring glaze (1 per glaze)
- 1 ware board on which to deposit glazed work (so I can move them if they dry slowly)

Note the glaze consistency in the bucket before applying; is it thick, creamy, watery? A glaze should be the consistency of heavy whipping cream. Glazes may become thick as they are used due to heavy usage and evaporation so you may need to add more water to the mix.

Be sure to mix the glaze well, stirring all thick contents from the bottom and sides of the bucket and keep it well stirred in between dips – some glazes settle quickly! Don't be afraid to use the power mixer located in the basement chemical lab in addition to stirring with your hand. The average glaze application should be full submersion of the piece for 2-3 seconds.

We recommend an “extended” single dips for the following glazes, approximately 5 seconds. This provides a thick single coat without the hazard of a double dip:

Reitz Green Temoku Celadon Easy Copper Red Mint Satin Green

A note on Shino glazes:

Never apply a shino OVER another glaze. This will cause dry blistering and pulling of the glaze surface. “Shino first or the pot is cursed” is a favorite saying. Shino is a terrific example of how application, thickness and firing atmosphere can influence the glaze results. Try dragging your finger tips through the wet glaze, drawing on the glaze surface with Aftosa wax once the surface is dry or applying a slip/wash under the glaze surface.

If you are double dipping or layering glaze be careful, especially near the foot of the pot. Until you fully understand the stability of the glaze combination it is best to keep overlaps contained to the rim and interior portion of the piece.

*It is important to note that glazes will change characteristics when applied to stoneware vs. porcelain clay. The presence/absence of iron in stoneware/porcelain impact the color of the glaze. Glazes may melt easier on porcelain due to the increased silica present in the clay which acts as an added flux to the glaze resulting in a “shinier” surface, richer colors and increased dripping. As a result a glaze may be dry on stoneware but glossy on porcelain, perfect fit on stoneware and stuck to the kiln shelf on porcelain. For this reason it is always important to test your glaze combinations before committing all of your work. Small 2” cups/bowls or vertical test tiles are a great starting point for glaze tests.

Don't forget to sponge clean the bottom of your pot before placing it on the glaze firing shelf! Wax resist alone will not prevent the glaze from bonding to the pot and kiln shelf.

Large Cone	F / C	Large Cone	F / C
^018	1322 / 717	^3	2134 / 1168
^012 - Cherry Red	1623 / 884	^4	2167 / 1186
^010	1652 / 900	^5	2185 / 1196
^08 - Orange	1751 / 955	^6	2232 / 1222
^06	1830 / 999	^7	2264 / 1240
^04	1940 / 1060	^8	2305 / 1263
^01	2079 / 1137	^9	2336 / 1280
^1 - Yellow	2109 / 1154	^10 - White	2381 / 1305
^2	2124 / 1162	^11	2399 / 1315

Chapter 8

Useful Vocabulary

Terms You Should Know!

Glossary:

Bisque: *Clay* that has been *fired* once at a low temperature without a *glaze*

Bisque Firing The low-temperature first *firing* a clay object which removes chemical water and hardens the ware prior to *glazing* and *glaze firing*.

Bone-ware: The state of *dry clay ready for bisque firing*. The *ware* has had time to dry sufficiently and is devoid of moisture.

Burnishing: A surface technique used to smooth the surface of a *leather hard clay* object usually done with a smooth stone or metal surface.

Carve: A surface technique used in decorating *clay* in its *leather hard* state, done by cutting into the surface with a needle, loop or knife.

Ceramic: Term used for all fired objects of clay. Also term used for field of creating clay objects.

China Paint: A *low-fired overglaze* used over previously *fired glazed clay* objects for a variety of colors.

Clay: A mineral and chemical composite that can be found in nature. When wet, it is plastic, brittle when dry, and hard when *fired*.

Clay Body: The compilation of materials to create a consistent mixture of various

clays. Pre-packaged *clays* are usually *clay bodies* formed from many different types of *clay* to create a desired affect.

Coil Construction: Technique of creating *pottery* or sculpture by rolling out coils and stacking them to create height and width.

Cones Pyrometric gauges that melt at specific temperature. Cone 10 equals approximately 2300 degrees Fahrenheit.

crawl: glaze defect distinctly noted as a roll or folding on itself to reveal bare clay beneath.

craze: glaze contraction that is greater than that of the clay body resulting in surface cracking of glaze.

darting: As in fabric, cutting to remove a “V” or “willow leaf”, section of vessel which is then rejoined. The result is a narrowing of profile for the vessel.

dunting: cracking of the glaze fired pottery caused by stresses formed during firing and cooling and significant imbalance between glaze and clay body: weak form, wrong material combination and/or imprudent application of material to match firing.

Earthenware: *Clay body* that is low-temperature fired with a permeable, porous body.

Engobe: Colored *slip* that is applied to the surface for decoration which will vitrify at a temperature equal to the maturation

temperature of a clay body.

Firing: The process of baking *clay* to remove chemical water from *clay* for *bisque* or to melt *glazes*.

Glaze: A combination of chemicals and colorants that you apply to your piece in a variety of ways in order to achieve a glasslike surface. Please see the glaze room wall for examples. No glaze can be on the bottom of your pots, and when applied too thickly, it will run and adhere your pot to the kiln shelf. Please take your time with the glazing process!

Greenware: dry *Clay* before it is *fired*.

Hand build: To create *clay* objects using handbuilding techniques such as pinching, coiling, and slab construction.

High-fire: The *glaze firing* for high fire *clay* (#153, 182, 380.). The pieces are loaded into the large gas kiln and fired in a *reduction* (or reduced oxygen) atmosphere and the *clay*, at this point (cone 10 or 2300 degrees F.), becomes fully *matured*, or *vitrified* (fired to the point of glassification).

Incised: A decorative technique of engraving in *greenware*.

Kaolin: Principal component of *porcelain*. A high-fired natural mineral that has almost no iron that allows for its whiteness.

Kiln: A special furnace that is created to withstand extreme heat temperatures in order to *fire ceramics*.

Leather-hard: The state of *greenware* after some drying. The *wet greenware* has had time to dry sufficiently to hold it's own shape

and is ready for altering, if desired.

Low-fire: Some *clays mature* at lower temperatures and therefore need to be *glaze-fired* at lower temperatures (clay#417, #104, #103). There are designated glazes for this kind of *clay*. Pieces are fired in the electric kilns to 1920 degrees F. (or cone 04). If low fire clay gets into a high fire *kiln*, it WILL melt and make a mess of the kiln, please be wary and know your clay.

Luster: *Glaze* that is iridescent and/or metallic.

Maturity: The point at which a *glaze* has reached complete fusion or *clay* has become completely *vitrified*.

Overglaze: Glaze applied to a *fired clay* object and then re-fired.

Oxidation Firing: Firing technique that allows for oxygen in the atmosphere of the *kiln* while firing.

Oxides: Colorants that can be applied before or after the *bisque firing*, but most effective when applied after the *bisque firing*. Can also be applied on top of *glazes*.

Pinching: Technique of creating *pottery* or sculpture by *pinching clay* to create height and width.

Plastic: The property of *clay* that allows it to be shaped and molded easily.

Porcelain: a vitrified white clay body that is translucent. It is the strongest and highest temperature-fired of all the clays.

Press Mold: Technique of casting *ceramic* ware by pressing a sheet of *clay* into a mold.

Raku: Firing technique developed in Japan. Ware is placed in red-hot *kiln* to allow *glaze* to melt and then quickly removed and placed in a combustible material and covered.

Reduction Firing: Firing technique that removes oxygen in the atmosphere of the *kiln* while firing. This reducing atmosphere dramatically changes the color of the ware.

Salt Glazed: Firing Technique in which raw salt is introduced into the *kiln* while firing. The salt vaporizes and reacts with the *clay body* and *glazes* for a glazing affect on the surface.

Scoring: Scratching into surface of *clay* in order to join two or more pieces together.

Sgraffito: *Clay* decorating technique in which *slip* is applied and then scratched or *carved*.

Silica: The basic ingredient to glass and therefore all *glaze*. It is also a primary ingredient to *clay*. Also known as *Flint*.

Slab Construction: Technique of creating *pottery* or sculpture by rolling out flat pieces of *clay* and joining them to create height and width.

Slip: *Clay* that is in liquid form. Used for joining two or more pieces of *clay* together.

Slip Cast: Process of pouring *liquid slip* in to a mold to create objects.

Stain: *Ceramic* colorants used to color *overglazes*, *china paints*, *engobes*, *low-fire glazes*, and body colorants.

Stoneware: A *vitreous high fired clay body* that is in between *porcelain* and *earthenware*.

Terra Cotta: An *earthenware* body that is red to brown in color.

Thixotropic: In *clay*, the tendency for a fluid that appears viscous under normal conditions to become less viscous when agitated.

Throwing: Term used for the process of creating *pottery* on the potter's wheel.

Underglaze: A colored *low-fired glaze* that is applied to *greenware* or *bisque* before having an *overglaze* applied.

Viscous: Having a thick, sticky consistency between solid and liquid.

Vitrify: To *fire* to the point of fusing the silica in the *clay*, *rendering the clay body non-porous*: