GLOSSARY FOR CERAMICS

BISQUE - Refers to pottery that has been fired once and remains unglazed.

BONE DRY - The condition of clay when all the water has evaporated. The clay is completely dry.

CASTING - A means of making multiples of the same form by pouring slip or pressing plastic clay into plaster or bisque molds.

CERAMICS - From the Greek word “keramos” meaning “burnt earth.” All those endeavors in which minerals are transformed by red heat into another form of material. Examples - pottery, glass, cements, plasters

CLAY - A combination of fine grain mineral fragments. The result of decomposition of rock possessing the properties of plasticity, porosity, and vitrifiability.

CLEAR GLAZE - A transparent and glossy glaze that can be put over matte underglaze for shine.

DAMP CLOSET - An enclosed closet or cabinet to maintain high humidity. It is used to store moist wares and keep them from drying.

DIPPING - A glazing technique in which the bisque piece is immersed in a glaze bath. It may also be used for dipping into engobe or wax.

EARTHENWARE - A category of pottery ware fired below cone 4 (low fire). It is relatively soft and porous and requires glaze to make it waterproof. The fired clay may be any color and is opaque.

FIRING - The process of heating clay work in a kiln to at least a glowing or white heat. Firing permanently transforms the clay to a rock-like state and melts glazes.

FLOATING - Scoring (scratching) leather-hard surfaces, applying slip, and joining leather-hard pieces.

GLAZE - A silicate (glassy-like) mixture with water that is applied to clay surfaces and melts into a glassy coating when fired.

GLOSS GLAZE - Glaze that results in a shiny surface.

GREENWARE - A ceramic piece that has been completed and dry but not yet fired. (Bone Dry)

GROG - Bisque clay that has been ground into a sandy sediment. It is available in different grain sizes and is used as a filler and textural agent. It also aids in preventing clay slabs from warping.

KILN - An oven or furnace in which clay wares and glazes are fired.

KILN WASH - A mixture painted on the top surfaces of kiln shelves to protect them against glaze drips and runs. Projects with runs are easily pulled up from the surface.

LEATHER-HARD - The condition of unfired clay about midway in moisture content between plastic and bone dry. The clay has lost its plasticity but looks moist.

MATTE GLAZE - A glaze with a dull, low reflective surface. It is velvety, silky, or buttery and is also at least somewhat opaque.

MATURATION - The ideal condition of fired clay, when it has been fired as high as possible, stopping short of sagging or slumping of the form from excessive melting. The clay is as hard as it can be and still hold its form.
OVERGLAZE- A glaze applied on top of another glaze. Often times, it is a clear/glossy glaze applied over a matte glaze to make it glossy.

PLASTICITY- A workable property of clay that enables it to take and hold any impression.

PORCELAIN- A pottery ware that when fired is pure white. It was developed by the Chinese over 1000 years ago.

PYROMETRIC CONE- The temperature gauge used when firing a kiln. Once the kiln reaches a certain temperature, the cone melts and triggers the kiln to turn off.

RAKU- A special method to glaze and fire pottery in a short time and at low temperature. It involves smothering hot-fired glaze pieces in organic matter (leaves, manure, straw). Glazes have a metallic appearance and in areas of no glaze, the bisque is a matte black from the smoldering organic matter. It is a centuries old Japanese procedure for making wares for the tea-drinking ceremony.

SGRAFFITO- A decorative technique. An glaze coating on the surface of a pot is incised or scratched through to uncover the color of the clay beneath. The color of the line drawing contrasts with that of the glaze.

SLIP- Clay made fluid with water; used for slip casting in molds and for decoration. It is also used like mortar for floating two pieces of leather-hard clay together.

STAIN- It is color applied or burnished onto a bisque surface and is not fired.

STONEWARE- A category of clay wares which reaches maturity at higher temperatures (above cone 4).

TEMPLATE- A pattern used as a guide for shaping clay. Made out of cardboard, poster board, or wood.

TEXTURED GLAZE- It has multicolored flecks and/or rough surface texture. For example: cracks, flakes, pebbles

UNDERGLAZE- A manufactured pottery pigment for application on greenware or bisque prior to gloss glaze application. It is often times a matte finish.

VITRIFICATION- A mature stage of stoneware clay after high firing. The clay is water-proof without glaze.

WAX RESIST- Wax is applied in a design to either plain bisqueware or bisqueware with 1 to 2 coats of glaze. Additional glaze in another color is applied over the piece. The waxed area will resist the newly applied glaze and after firing, the design will show in contrasting colors. Wax can also be applied to bottoms of pottery when applying glaze with the dipping technique.

WEDGING- A method used to prepare clay. It is a technique closely related to kneading bread. Wedging is done to achieve a number of things. 1. All clay particles and platelets are mixed and organized into uniformity (homogeneous). 2. Air bubbles are removed. 3. Moist clay can be dried to workable state. The two techniques are called RAM’S HEAD and SPIRAL.