

**BISQUE** – Pottery that has been fired to a low temperature, usually cone 05 (1900°F), but not yet glazed.

**BURNISHING** – Polishing leather-hard clay by rubbing the surface with a polished stone or burnishing tool.

**CERAMICS** – Clay products made permanent by heat. The word comes from the Greek “keramos” meaning potters clay and the ware made from it.

**CLAY BODY** – Generally refers to the combination of clay ingredients calculated to mature at a desired temperature and to have desired working characteristics, such as suitability for working on the wheel, or hand-building; or having certain color characteristics.

**COMMERCIAL GLAZES** – Premixed glazes that are manufactured by such companies as Western, Duncan, and Amaco and can be bought at a ceramics supply store.

**CONES (PYROMETRIC CONES)** – Small triangular cones made of ceramic materials which are compounded to bend and melt at specific temperatures, thus giving a visual indication that the given cone temperature has been reached.

**FIRING** – The process by which clay converts to ceramic. It involves a heat of at least 1100° F. During the firing clay is changed to a stone-like material and organic matter is burned away. The colors of the mineral change, and a layer of glass known as glaze can be fused to the surface of the ware.

**GLAZE** – A liquid suspension of finely ground materials which is applied by brushing, pouring or spraying on the surface of bisque-fired ceramic ware. After drying, the ware is fired to the temperature at which the glaze ingredients melt together to form a glassy surface.

**GLAZE FIRE** – A firing cycle to the temperature at which the glaze materials melt.

**GLOSS GLAZE** – A shiny surface glaze.

**GREENWARE** – Dry, unfired ceramic ware.

**GROG** – Ground up fired clay. Grog provides texture, opens up the clay body to help uniform the drying, and cuts down on shrinkage in clay bodies.

**KILN** – A furnace for firing pottery.

**KILN WASH** – A coating that protects kiln shelves from runny glazes.

**PLASTICITY** – The ability of clay to bend without breaking and to hold a chosen form.

**LEATHER HARD** – Clay that has dried sufficiently to be stiff, but is still damp enough to be joined to other pieces of clay with slip; ideal for trimming pots or carving.

**MATTE GLAZES** – A glaze that is dull-surfaced.

**OXIDATION** – Firing method in which an excess of oxygen is available, permitting specific chemical reactions to take place that affect the appearance of the glaze. Usually performed in an electric kiln.

**QUARTZ INVERSION** – The temperature in which flint (silica or quartz) is turned into a crystalline form. If this temperature of 1000°F is passed too quickly, ware will crack.

**RAKU** – A low temperature firing technique invented by 16<sup>th</sup> century Japanese potters. Traditional Japanese raku is associated with small, hand-built bowls that are used in tea ceremony. The firing technique generally involves placement of pieces in a pre-heated kiln, firing the pieces, then removing them red hot from the kiln with tongs when the glaze has reached maturity. At this point the ware may be placed in a combustible material such as sawdust or newspaper. This smoking or reduction process will affect the color of both the clay and the glazes.

**REDUCTION** – A glaze firing in which oxygen is limited (reduced) to enhance the properties of the clay body and affect the appearance of specific glazes.

**SCORING** – The process of scratching the facing surfaces of clay joints when attaching clay parts to one another. After scoring, the scratched areas are coated with slip and then pressed together, which creates a stronger, bonded joint.

**SLIP** – Clay and water mixed together to a soupy consistency.

**THROWING** – A method of creating clay forms in which a ball of clay is thrown on a revolving potter's wheel, where it is centered and then worked into a shape with the hands.

**UNDERGLAZE DECORATION** – A ceramic decoration applied to greenware or bisqued surfaces. Pieces are then covered with glaze to make them shiny after firing.

**VITRIFICATION** – Stage of firing beginning at 1470°F when the particles within the clay body start to flux or melt. The body shrinks during vitrification. Vitrification strengthens the final product by welding the clay particles together with silica.

**WAX RESIST** – A technique of using liquid wax to keep glaze from adhering to a piece.