

Ceramics Two Vocabulary

Ceramics Terms

Oxidation Firing – when the amount of oxygen present is more than necessary to combust the fuel.

Reduction Firing – there is insufficient air in the kiln for complete combustion. Metal oxides in the clay and glazes release oxygen and this changes the color of the clay body and glaze.

Kiln Furniture – heat resistant shelves and posts used to hold ware during firing.

Grog – crushed fired clay used as an additive to clay body to reduce shrinking.

Organic Form – a non-angular form with biological associations (resembles forms in nature)

Maquette – a small-scale model for a larger sculptural project.

Plasticity – the quality of clay that allows it to be easily manipulated and still maintain its shape.

Short – a term used to describe clay that is dry and lacks plasticity.

Wax Resist – liquid wax applied to bisqueware that resists stain or glaze, leaving the raw clay exposed after firing. Used for decoration or glaze dipping.

Throwing – The process of shaping plastic clay on the potter's wheel.

Calipers – a hinged tool used for measuring diameters on the inside or outside of a three-dimensional form.

Centrifugal Force – The tendency of matter to “flee from the center” when spun. Faster rotation creates stronger centrifugal force.

Wheelhead – the flat circular revolving plate of the potter's wheel upon which the pot is formed.

Earthenware – clay that matures at a low temperature but remains porous (absorbent)

Porcelain – a strong, vitreous (glass-like), translucent white clay body that matures at cone 10 or above.

Stoneware – dense, non-porous, hard pottery that matures from cone 5 to 11.

Glaze Vocabulary

Glass Former – a material that, in combination with fluxes, will form the glass essential to all ceramics. The primary glass former is Silica.

Refractory – the quality of being able to withstand high temperatures without melting. The primary refractory used in glaze is Alumina.

Flux – A material in glaze that promotes melting.

Colorant – an element or compound that contributes color to a slip, glaze or ceramic surface.

Crawling – Glaze defect where molten glaze pulls away from portions of the surface to leave areas unglazed. Can be caused by grease or dust on the bisqueware.

Crazing – glaze defect where a network of fine lines caused during cooling when tension between the clay body and glaze is uneven.

Gloss – shiny & reflective

Matte – non-glossy

Opaque – non-transparent

Transparent – clear

Ceramics One Vocabulary

Banding Wheel – a turntable used for manually rotating a ceramic piece while it is being worked on.

Bat – a base for storing your project while working on it; usually made of plastic, pressboard, plywood or plaster.

Bisqueware – clay that has been fired once, unglazed.

Bone Dry – Stage of drying when all moisture in the clay has evaporated so the clay surface no longer feels cold.

Ceramics – from the Greek word *Keramos*, meaning burnt earth

Coils – snake-like rolls of clay attached together to create forms.

Firing – the heating of clay or glaze to a specific temperature.

Functional Ceramics – ceramics that have a use or purpose in everyday life (bowl, plate, mug, etc.)

Glaze – a coating of glass that is fused to the surface of a ceramic piece during firing.

Greenware – unfired clay objects.

Kiln – a structure built to fire ceramic objects.

Leather Hard – the stage of drying where clay has started to dry, but still may be carved or joined to other pieces.

Scoring – to scratch moist or leather-hard clay before adding slip to attach other pieces of clay securely.

Sgraffito – a form of decoration made by scratching through a surface of colored slip to reveal the contrasting color of the clay beneath.

Shrinking – clay contraction that occurs during drying and again during firing.

Slabs – broad, thick, flat pieces of clay used in hand building.

Slip – “liquid clay” used in joining pieces together and for decoration.

Stain – thin, watery liquid colorant applied to and wiped off bisqueware to enhance textures

Textures – ***Additive***: adding clay to the surface to create texture; ***Incised***: Cutting or Carving into the clay; ***Impressed***: Pressing objects into the clay.

Warping – caused by uneven wall thickness, or uneven drying.

Wedging – kneading the clay to remove air and lumps and to make it have an even texture.