

## Some Ceramic Vocabulary adapted from Ms. Linda Arbuckle!

**Batt:** A flat disc made out of plaster, wood, or plastic which is affixed to the wheel head with clay or pins. Bats are used to throw pieces on that would be difficult to lift off the wheel head when wet.

**Bisque fire:** An initial firing of raw clay ware to burn out physical water, chemical water, and carbonaceous matter, and make the clay into a material that will not slake down in water and may more easily be glazed.

**Bisqueware:** Clay ware that has been fired once. Common studio practice is to bisque lower than the glaze maturity temperature to keep the body porous enough to accept glaze. Bisqueware will no longer slake down in water and CANNOT be recycled.

**Bone-dry:** Finished pieces that are ready to go into the bisque kiln. Unfired clay with as much atmospheric water evaporated as relative humidity permits. The piece is dry, light in color, and very fragile. Clay in this state can be recycled and will slake down completely in water to an amorphous mass.

**Centering:** Using your hand on the potters' wheel to move a dome of clay into a balanced position in the center of the wheel head or batt in preparation for raising a wall or other shaping.

**Clay:** Material formed from decomposed granitic rock. Clay particles have a flat, plate-like structure. A prepared *clay body* contains a mixture of various clays, fluxes, and fillers to have the desired color, working properties, and firing temperature.

**Cone / Pyrometric cone:** Measures "heat work" in a kiln (time *and* temperature). We talk about temperatures in ceramics in terms of the desired cone, rather than degrees. Pyrometric cones are formulated to melt or "fall" after absorbing specific amounts of heat energy in the kiln.

Lowfire: Clay work fired between cone 06-02

Midrange: Clay work mature between cone 4-6

Highfire: Clay work fired between cone 8-10.

**Dry foot:** The practice of leaving the bottom of a ceramic piece unglazed so it may sit directly on the kiln shelf without sticking.

**Earthenware:** Lowfire clay body that is not vitrified at maturity. May be white, buff, or red in color. Buff and red earthenware bodies occur naturally; white lowfire bodies are man-made.

**Glaze:** Glassy melted coating fired on to ceramic object for visual or functional purposes. Glazes all contain a glassformer + viscosity agent + flux. May be glossy, satin, or matte surface.

**Greenware:** Shaped, unfired clay work. Pieces you're finished making / are drying or waiting to be fired.

**Grog:** Clay ingredient made of ground, bisque clay added to clay bodies to add texture ("tooth"), reduce shrinkage, and aid drying.

**Kiln:** Furnace for firing clay work through the application of heat. Combustible fuel (wood, gas, coal) or electrical resistance may be used to heat the chamber.

**Leather-hard:** State when clay holds enough moisture to still be dark in color, but is no longer plastic, is stable in form, and can be easily carved or trimmed. Leather-hard clay can be recycled. Put in water, it becomes softer but does not completely dissolve the form. Clay can be “soft leather hard” or “hard leather hard” and is often compared to cheese or chocolate in this stage.

**Oxidation:** Condition in firing where sufficient oxygen exists to allow clean burning of any combustible materials in the firing. Electric kiln firing is an oxidation atmosphere.

**Plasticity/plastic clay stage:** State where clay responds to forming pressure. Plasticity is the ability of a material to respond to pressure and hold that form. “Wet clay.”

**Porcelain:** White, fine-grained, high-fire clay body that is vitrified at maturity and translucent where thin. Fired typically between cone 10-11. There are mid-range white bodies that are also called “porcelain”, although they are not fired to traditional temperatures.

**Reduction:** A condition, usually in a fuel-burning kiln, where there is insufficient oxygen for complete combustion of the fuel in the kiln. This forms carbon monoxide, which takes loosely bonded oxygen from iron and copper materials, changing their molecular form and color.

**Refractory:** Something is resistant to heat and melting.

**Resist:** Material applied to protect a surface from something else being applied. In the case of paper and latex, the resist is usually removed before firing. With wax and varnish, the resist is fired off.

**Scoring:** To scratch clay surfaces to provide extra surface area for a sturdy join.

**Slake:** To put dry unfired (greenware) clay in water and “dissolve” it into an amorphous state.

**Slip:** A mixture of clay and water, which can be colored with oxides or stains and used for decoration. Some people use engobe as a synonymous term.

**Stoneware:** Highfire clay body that is vitrified at maturity, fired to cone 8-10. Contains iron. Classic stoneware fires to a toasty orange-brown color in reduction and is grey under a clear glaze. It is possible to formulate white stoneware bodies that are off-white and between a porcelain and stoneware body.

**Terra cotta:** Earthenware clay body that is generally red in color. Matures between cone 06 and cone 03.

**Throwing:** Using the potters’ wheel to produce clay forms in plastic clay.

**Underglaze:** A commercial product that is like a finely ground slip of colored clay that usually requires a glaze on top. Traditional underglaze calls for 3 coats.

**Vitrification:** Fired state where clay is hard, dense, non-porous and will hold water without glaze.

**Wedge:** Kneading of clay in the plastic state to homogenize the consistency.