

| | | |
|--|--|--|
| glaze flaw where the fired glaze has a network of cracks in it | cone to which we bisque fire | color of iron in reduction. |
| glaze flaw resulting in the glaze peeling off the edges of the fired piece. | cone to which stoneware is glaze-fired | color of copper in reduction. |
| crack thru the clay body (i.e. the pieces splits in half) caused by cooling shock and/or excessive cristobalite in the body. | cone to which decals, lusters and china paint are fired. | resistant to heat |
| glaze flaw where the glaze rolls back during firing and exposes bare clay. | cone at which we begin reduction in a glaze firing | temperature when water turns to steam |
| cause of crazing | measures current temperature at a specific location in a kiln. | hard, dense, glassy, may hold water w/o a glaze |
| cause of crawling | measures work-heat in a kiln | temperature of quartz inversion |
| cause of shivering | color of iron in oxidation. | temperature of cristobalite inversion |
| blisters or air pockets that occurred during firing in the wall of the clay piece. | color of copper in oxidation. | Kiln atmosphere where it is in between oxidation and reduction, characterized by green backpressure flames |
| Kiln atmosphere where there is more fuel than air to burn it completely | Kiln atmosphere where there is more air than fuel and the fuel burns cleanly | Shape of a reducing flame |

| | | |
|------------------------------------|-------------------|---|
| Green, blue, gray (celadon glazes) | 05 | crazing |
| Red | 9-10 | shivering |
| refractory | 022-016 | denting |
| 212 deg F | 010 | crawling |
| vitified | pyrometer | Glaze shrinks more than the clay body during cooling |
| 1000 deg F | Pyrometric cone | Overly viscous glaze, oily or dusty bisque, glaze too thick |
| 451 deg F | Tan, brown, rust | Clay body shrinks more than the glaze in cooking |
| neutral | Green, blue-green | bloating |
| Long, soft | oxidation | reduction |

| | | |
|---|---|---|
| Shape of an oxidizing flame | Color of an oxidizing flame | When you use a cone 05 in a kiln sitter, what visual cone should be melted to 3 o'clock in a visual cone pack? |
| What the lower cone pack in a reduction firing is used to indicate | What the higher cone pack in a reduction firing indicates | Color of a reducing flame |
| To create a reducing kiln atmosphere, how would you adjust the kiln damper? | To create a reducing kiln atmosphere, how would you adjust the gas pressure? | To change the kiln from a reducing to oxidizing atmosphere, how would you adjust the gas pressure? |
| Name for a type of kiln that has the flue in the top of the kiln, like our Alpine | To change the kiln from a reducing to oxidizing atmosphere, how would you adjust the damper? | To change the kiln from a reducing to oxidizing atmosphere, how would you adjust the blower on a forced-air kiln? |
| Name for a type of kiln that has the flue in the bottom of the kiln, like our Geil | Term for the part of the kiln where the flame is | Term for the row of brick between the flames and ware |
| Numbers of the cones in the lower cone pack for reduction firing, in the order in which they will melt | Numbers of the cones in the higher cone pack for reduction firing, in the order in which they will melt | What happens if you fire with a cone pack that isn't dry? |
| In an updraft kiln like the Alpine, how would you adjust the damper if the bottom was hotter than the top? | In a downdraft kiln like the Geil, how would you adjust the damper if the bottom was hotter than the top? | Why is stoneware clay grey under a glaze but toasty orange-brown on the foot? |
| The significance of checking if a kiln is cool enough to unload by seeing if paper burns at a peep hole is... | What is cristobalite inversion? | Where is kiln wash applied and why? |
| Name for the kind of water that evaporates or is driven off below 212 deg F | After you place the cone in the kiln sitter, what else do you need to do? | Name the first 3 steps in setting a kiln sitter |

| | | |
|---|---|---|
| 06 – one cone lower | blue | Short, bushy |
| orange | When the body and glaze are mature | When to begin reduction |
| Lower | Increase | Close some |
| Updraft | Open some | Increase |
| bagwall | firebox | downdraft |
| 011, 010 09, 4 | 6, 8, 9, 10 | Explodes, then you have to stop the kiln, unload, clean up the cone pack shards, and re-load with new cone packs. |
| Iron reduces to grey color, and is protected from re-oxidation by glaze. Bare clay re-oxidizes in cooling. | Close the damper a bit to reduce the draw and allow the heat to build toward the top. | Open the damper some to draw in more secondary air and let the heat rise faster. |
| Kiln wash is applied to the tops of the shelves so it will release any glaze drips after firing w/o damaging the shelf. | Free silica becomes cristobalite at about 1950 deg F. Cristobalite changes size + or – 2% at about 451 deg f. | Paper burns at a temperature close to cristobalite inversion. |
| Raise trip lever, lower the claw and hold it down, on the inside insert a cone parallel to the kiln wall in the middle of the holder w/flat side down | Turn up the timer, push in the button | Physical water |

