

UNIT 4

UNFIRED FINISHES

Requirements:

(Refer to requirements Unit 1-4 on page 2)

Basic Information:

Unfired finishes:

- (1) Are commonly referred to as “stains”.
- (2) Are usually restricted to decorative pieces.
- (3) Are more suitable for earthenware bisque but some may be applied to porcelain.
- (4) Require only one bisque firing, with the exception of pieces that are to be glazed inside to hold liquid (i.e. vases, pitchers, planters, etc.).
- (5) Are best applied on, highly detailed, utility pieces (i.e. vases, pitchers, planters, est.), bisque fired to cone 05, or to decorative pieces (figurines) bisque fired to cone 06.
- (6) Are “forgiving”. If you do not accomplish what you wish, the unfired finishes may be fired away. You then can remove residue and resume staining your piece.
- (7) Are usually polished or sealed with a fixative (follow manufacturer’s suggestions).

Types of most common unfired finishes:

- (1) Opaque is a water base stain that you are unable to see through (solid coverage).
- (2) Translucent is used for antiquing, rouging, high lighting, shadowing and simulated china painting.
Types of Translucent stains are:
 - (a) Water base
 - (b) Oil base
- (3) Pearl simulates a mother of pearl effect. Pearls may be:
 - (a) Opaque
 - (b) Translucent
- (4) Metallics produce a “metal like” appearance. Types of unfired metallics are:
 - (a) Powder
 - (b) Oil base
 - (c) Wax base
 - (d) Varnish base
 - (e) Water base
- (5) Lustres are translucent which produces an iridescent sheen when applied over opaque colors or to bisque ware.
- (6) Chalk produce a china painted porcelain look. It should be applied over sealed earthenware or polished porcelain.
- (7) Gold Leaf is gold beaten into an extremely thin sheet. It is applied with an adhesive, usually to bisque.
- (8) Sculpture Paste or Powder may be mixed with opaque stain for a color build-up technique. It is more suitable for earthenware.

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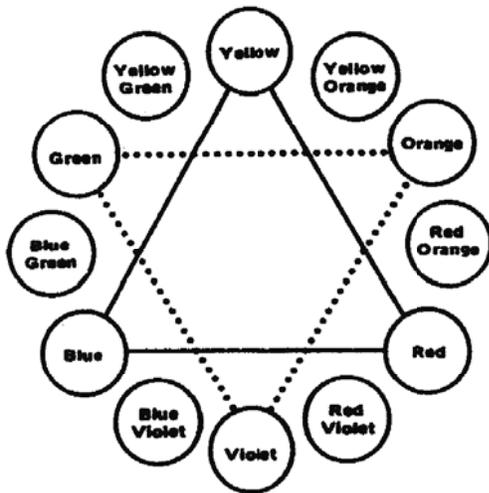
Before beginning your projects, try your skill at mixing colors. Having knowledge of “color mixing” is very important. You will be amazed at what you can achieve.

Color Wheel Exercise:

Colors you will need:

- (a) The primary colors (Yellow, Red and Blue).
 - (b) Black and White.
- (1) Draw a large circle, the size of a saucer, on the smooth side of butcher paper. Inside the large circle, draw twelve circles the size of a nickel. Number the circles as if you were making a clock dial.
 - (2) Draw a solid line, making an equilateral triangle, connecting 12 (yellow) - 4 (Red) and 8 (Blue).
 - (3) Draw another equilateral triangle, this time with broken lines, connecting 2 (Orange) - 6 (Violet) and 10 (Green).

Your drawing should look similar to the color wheel below.



Paint yellow in the 12 o'clock circle. Red in the 4 o'clock circle and blue in the 8 o'clock circle.

Be sure to wash the paint knife and brush well between each color.

Primary Colors:

Yellow, Red, and Blue (they are the strongest colors).

Secondary Colors:

Orange, Violet and Green (secondary colors are a combination of two primary colors).

Mixing Secondary Colors:

Mix equal amount of yellow and red, with a paint knife, on a piece of foil. Did you get an orange? Great!!! Paint the orange in the 2 o'clock circle. Save the left over orange paint.

Mix equal amount of red and blue. You made a violet. Paint the violet in the 6 o'clock circle. Save the left over violet paint.

Mix equal amount of blue and yellow. Did you get a green? Fantastic!!! Paint the green in the 10 o'clock circle. Save the left over green paint.

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Color Wheel Exercise Cont:

Intermediate Colors:

Yellow-Orange, Red-Orange, Red-Violet, Blue-Violet, Blue-Green, Yellow-Green (these are made by mixing a secondary color with an adjacent primary color). Always mix a small amount of the dark color into the light color until you achieve the desired color.

Mixing Intermediate Colors:

Mix orange into the yellow until you have a nice yellow-orange color. Paint this color in the 1 o'clock circle.

Mix red into the orange until you have a nice red-orange color. Paint this color in the 3 o'clock circle.

Mix red into violet until you have a nice red-violet color. Paint this color in the 5 o'clock circle.

Mix blue into the violet until you have a nice blue-violet color. Paint this color in the 7 o'clock circle.

Mix blue into the green until you have a nice blue-green color. Paint this color in the 9 o'clock circle.

Mix green into the yellow until you have a nice yellow-green color. Paint this color in the 11 o'clock circle.

The placement of the colors should be the same as shown on the color wheel on the previous page. Save your color wheel for future reference.

Other colors I have mixed:

Select the correct color.

What color did you get when you mixed green and violet? _____ Citrine
What color did you get when you mixed violet and orange? _____ Russet
What color did you get when you mixed orange and green? _____ Olive Green

The colors you obtained by mixing the secondary colors above are called Tertiary colors.

Select the correct color.

What color did you get when you mixed blue and white? _____ Crisp Pink
What color did you get when you mixed red and white? _____ Pale Green
What color did you get when you mixed Green and white? _____ Baby Blue

The colors you obtained by mixing white with the darker colors are called shades and tints.

A project that is done in several shades of one color is known as a Monochromatic color scheme (i.e. pale blue, sky blue, baby blue, etc.).

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Other colors I have mixed cont.:

What color did you get when you mixed blue and black? _____

You can obtain darker shades of colors when you mix black or brown with your colors. These are excellent colors for shadowing. The exception to the rule would be mixing black with yellow.

What color did you get when you mixed **just a dot of black** into about one teaspoon of yellow?
_____ **A darker shade of yellow can be obtained by using brown.**

Select the correct color.

What color did you get when you mixed red, orange, and green? _____

Gray

What color did you get when you mixed yellow and violet? _____

Brown

If you decide to mix colors, to paint your piece, be sure to mix enough of the color that you will need for that particular area. Some mixed colors may vary in color if the exact formula is not followed.

Remember that all colors will work well together if you watch the placement, using the five basic color schemes. Your pieces will be more interesting if the amounts of colors are unequal.

PROJECT 1

Basic Information:

- (1) Project 1 is a lesson in opaque stain application. .
- (2) *Senior members must combine two techniques (i.e. antiquing over opaque stain, etc).*
- (3) *Repeating members of Unit 4 must indicate a progressive learning situation in their records.*
- (4) This piece will be considered as one of your required pieces. **Learning projects are usually not entered in competition.**
- (5) Brushes and supplies you may need to purchase:
 - (a) A variety of sizes of detail nylon brushes or stiff bristle brushes. Brush selection depends on the technique to be used.
 - (b) A soft to medium ox hair brush. **Keep it away from your other brushes if used with oil base antique. Mark this brush to indicate it is to be used with oil base stain only.**
 - (c) Solvent.
 - (d) Fixative (Sealer).

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Steps:

- (A) Select a small figurine or any small decorative item.
- (B) Prepare work area.
- (C) **Remember the rules.** Refer to page 3
- (D) Clean greenware using proper tools. Refer to page 4.
- (E) Initial and date the bottom of piece for identification.
- (F) Fire to cone 06. Items that require glazing inside, fire to cone 05.
- (G) Keep accurate notes as you proceed.

- (H) Prepare work area. **Do not use newspaper.** Newspaper has a tendency to leave print on the piece.
- (I) Clean kiln dust from piece with a damp sponge.
- (J) Pieces requiring the inside to be glazed:
 - (1) Prepare rolling glaze mixture and roll the glaze inside of the piece. Be sure to clean any unwanted glaze from the outside with a damp sponge.
 - (2) Fire to cone 06.

- (K) Clean kiln dust from piece with a damp sponge.
- (L) Start with flesh color for the human figurines. Always start with the “inside” colors and graduate to the “outside” colors (i.e. The flesh color would be applied to the face before the hair color is applied or the inside garment before the outside garment). The eyes and other small features should be painted last.

Brushing Technique:

- (1) Pour a small amount of color onto your (clean) work tile.
- (2) Thin the color, with water, to canned cream consistently.
- (3) Load a nylon brush tip with a small amount of color. Never load your brush with any more color than you can apply in a few seconds. Stains dry very quickly. If too much color is in your brush, and it dries, it will leave ripples.
- (4) The stain must be brushed out to create a smooth finish.
- (5) Overlap each time you reload your brush with the same color. Some colors may require two coats when using this form of application.
- (6) Seal the stain by polishing (buffing) with a soft cloth or by using a (gloss or matte) fixative.
Read manufacture’s suggestions.
- (7) Clean your work tile well each time you change colors.
- (8) Wash the brushes with soap and water. **Never let the stain dry in the brushes.**

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Scrub Technique:

- (1) Load your stiff bristle brush tip with a small amount of color and scrub the color into the piece until smooth. Overlap each time you refill your brush with the same color.
- (2) Before changing color on your work tile, be sure bare bisque is not showing in the area in which you are working. Re-apply color if it is needed.
- (3) When the figurine piece is finished and you are satisfied with the application, paint the eyes (referring to Unit 2 “Eyes For You”). Paint tiny dots of light pink inside the nostrils. The lips may also be pink or another color of your choice.
- (4) Seal the stain by polishing (buffing) with a soft cloth or by using a (gloss or matte) fixative.
Read manufacture’s suggestions.
- (5) Clean brushes with soap and water. **Never let the stain dry in the brushes.**
- (6) First year members may stop here or continue if they prefer.

Oil Base Antiquing Technique:

- (1) Apply a thin coat of dark brown antiquing over entire stained piece using a soft to medium ox hair brush. The antiquing should be applied evenly. Let dry for a few minutes.
Do not let it dry over night.
- (2) You will need two or three pieces of tee shirt material. One for holding the piece and one piece for antiquing. Third piece may be needed for final “clean up”.
- (3) Wrap one piece of tee shirt material around your index finger and moisten the cloth with the antiquing solvent. Hold your piece with the dry cloth.
Using the side part of your covered finger, wipe away the antiquing. Start from the top of the piece, and with one swipe, work your way to the bottom. Do not go deep inside detail areas that your cloth did not reach. This will give a natural shadowing effect. Change the moist antiquing cloth to a clean area often.
- (4) Once you have antiqued the piece, go over the piece once again with a clean moist antiquing cloth for the final cleaning. The colors under the antiquing should be bright and not muddy.
- (5) Seal the piece with a spray on fixative (gloss, matte or porcelain). Apply fixative lightly two or three times. Over (heavy) application will make your piece cloudy.
- (6) Clean brush in mineral spirits, or petroleum base solvent, and then with soap and water.

Water Base Antiquing Technique:

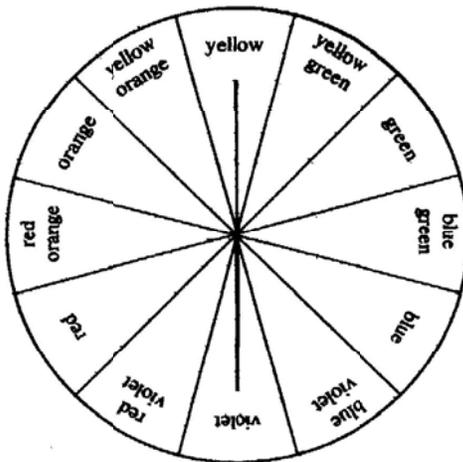
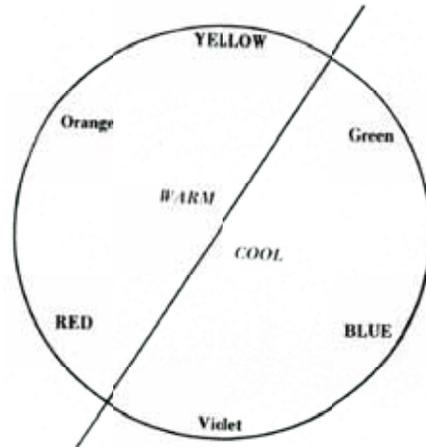
- (1) Using an ox hair brush apply a thin coat of dark brown antiquing over the entire piece. Let dry for a few minutes. **Do not let it dry over night.**
- (2) Wipe away antiquing with a damp sponge, from top to bottom in one swipe. Rinse sponge with each swipe. Change the water often.
- (3) Colors under the antiquing should be bright and not muddy.
- (4) Seal the piece with a fixative.
- (5) Clean brush with soap and water.

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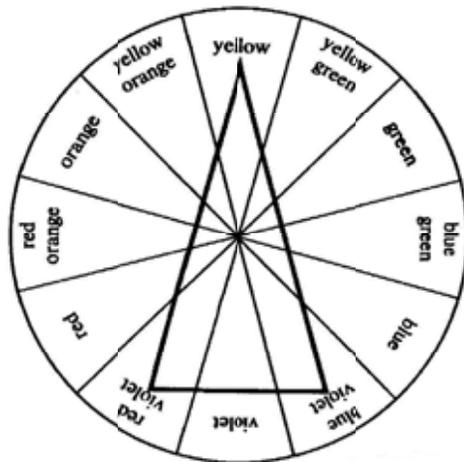
Hint:

You can always make your warm colors look brighter by using a cool complementary color with it.



Complementary Colors:

Are colors directly across from each other on the color wheel.



Split Complementary Colors:

Using the colors immediately to the right and left of it's complement.

PROJECT 2

Basic Information:

- (1) You may choose to learn advanced eye making or advanced brush strokes.
- (2) Advanced eye making may include:
 - (a) Human.
 - (b) Animal.
 - (c) Fowl.
 - (d) Reptile.
- (3) Advanced brush strokes may include:
 - (a) Teardrop.
 - (b) Curved teardrop.

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Basic Information cont:

- (c) Eyebrow.
 - (d) “C” (forward and backward).
 - (e) “S” (forward and backward).
 - (f) Leaf stroke (basic).
 - (g) Thick and thin strokes.
 - (h) Long and short strokes.
 - (i) Design work combining different strokes.
- (4) This project will be considered as one of your required pieces. **Learning projects are usually not entered in competition.**
- (5) You may complete the skill of your choice on a plain piece or figurine.
- (6) Brushes you may use:
- (a) Sable or Nylon Round brush (size/s to fit brush strokes).
 - (b) Sable or Nylon Square Shader brush (size/s to fit brush strokes).
 - (c) Sable or Nylon Liner brush (size/s to fit brush strokes).
 - (d) Sable or Nylon Detail brush (size/s to fit brush strokes).

Steps:

- (A) Select suitable greenware.
- (B) Prepare work area with suitable covering.
- (C) **Follow the safety rules.** Refer to page 3
- (D) Clean greenware as outlined on page 4. Initial and date the bottom of your piece.
- (E) Have the piece fired to the proper cone size.
- (F) Keep accurate notes as you proceed.

**Your leader or ceramic instructor will give you the instructions for your project.
Remember to enter your information on the technique sheet as you process.**

PROJECT 3

Basic Information:

- (1) **Fantastic!!!** You have completed projects 1 and 2.
- (2) You are ready to create your project 3 which may be your exhibit piece.
- (3) The skills learned in this unit:
 - (a) Opaque stain application.
 - (b) Making advanced eyes or brush strokes.
 - (c) How to create a color wheel from the primary colors.

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Suggestions:

- (1) Before choosing your piece, and if you have the opportunity, go to several ceramic studios to see what is available.
- (2) Refer to web sites and ceramic publications for technique ideas. Check references on page 70.
- (3) You may want to change your piece by alternating the design of the greenware (Greenware adaptation).
- (4) Be sure to stay within your unit medium (unfired finishes).
- (5) Keep accurate notes as you proceed.

Steps:

- (A) Follow the cleaning steps as outlined on page 4.
- (B) Decide on the technique you wish to achieve.
- (C) Complete your E-records.
- (D) Evaluate your piece, using the guide line on page 8.

Ceramic Check List:

New brushes and tools I learned about in this unit.

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What I learned about the care of brushes and tools in this unit.

Congratulations!! By completing 3 or more projects, exhibiting E-records and one project, you have completed this year's Unit.

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CERAMIC KNOWLEDGE AND GOALS CHECKLIST:	New skills I have Learned.	Skills I want to learn or improve.
Altering the greenware pattern for a special effect.		
Application of water-base opaque stain.		
Application of water-base translucent (antiquing) stain.		
Application of oil-base translucent (antiquing) stain.		
Application of pearl stain.		
Application of metallic stain.		
Application of lustres stain.		
Chalk technique.		
Gold leafing technique.		
Dry brush technique.		
Wet brush (side brush) technique.		
Simulated China paint technique.		
Rouging technique.		
Veiling technique.		
Stencil technique		
Advanced human eye technique.		
Advanced animal, fowl and reptile eye technique.		
Advanced Brush stroke technique.		
Norwegian Rosemaling technique.		
Design work		

Put the date when you learned the skills. Place a check mark in the column of skills you would like to learn. Discuss skills you would like to learn with your leader. She/he will be able to give you hints as how to achieve your goal.
