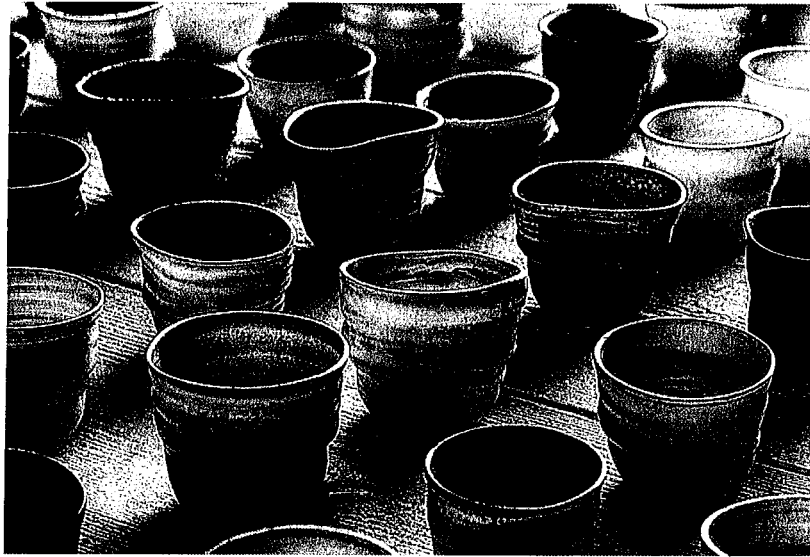


UC  
CE

# Ceramics and Clay Arts



It is the policy of the University of California (UC) and the UC Division of Agriculture & Natural Resources not to engage in discrimination against or harassment of any person in any of its programs or activities (Complete nondiscrimination policy statement can be found at <http://ucanr.edu/sites/anrstaff/files/169224.pdf>). Inquiries regarding ANR's nondiscrimination policies may be directed to Linda Marie Manton, Affirmative Action Contact, University of California, Davis, Agriculture and Natural Resources, 2801 Second Street, Davis, CA 95618, (530) 750-1318.



***This We Believe:***

- The boy and girl are more important than the projects.
- The member should be their own best product.
- No award is worth sacrificing the reputation of a member or leader.
- Competition is a natural human trait and should be recognized as such. It should be given no more emphasis than other fundamentals.
- Learning how to do the project is more important than the project itself.
- Many things are caught rather than taught.
- A blue ribbon member with a red ribbon project is more desirable than a red ribbon member with a blue ribbon project.
- To learn by doing is fundamental in any sound educational program.
- Generally speaking, there is more than one good way of doing most things.
- Every member needs to be noticed, to feel important, to win, and to be praised.
- Our job is to teach members *how* to think, not what to think.

# CERAMICS

## Sonoma County 4-H

Name: \_\_\_\_\_ Date: \_\_\_\_\_

### Guidelines for Project Proficiency Award Beginning

<u>Date</u> <u>Completed</u>	<u>Leader's</u> <u>Initials</u>
---------------------------------	------------------------------------

15. Match the words with their definitions:

- |              |               |                  |
|--------------|---------------|------------------|
| a. Sgraffito | b. Wax Resist | c. Slip Trailing |
| d. Stamping  | e. Relief     | f. Combing       |
| g. Sprigging | h. Marbling   | i. Incising      |
| j. Inlay     |               |                  |

_____	_____
-------	-------

- i. Slip coated design relief applied to leather hard surface \_\_\_\_\_
- ii. Applying slip with a syringe to leather hard surface \_\_\_\_\_
- iii. Wedging together different colored clay slabs \_\_\_\_\_
- iv. Carving away leather hard clay leaving a raised design \_\_\_\_\_
- v. Scratching through a colored slip to contrasting clay below \_\_\_\_\_
- vi. Applying wax to a piece prior to glazing to prevent sticking \_\_\_\_\_
- vii. Carving lines into the clay surface with a tool \_\_\_\_\_
- viii. Dragging a multi pronged tool or feather over wet glaze or slip \_\_\_\_\_
- ix. Pressing objects into wet clay to make a design \_\_\_\_\_
- x. Carving out a pattern and replacing with a contrasting color \_\_\_\_\_

16. Exhibit a project at a craft show, fair, etc.

17. Give a demonstration at Presentation Day.

18. Give a demonstration in your club.

19. Teach a friend (who is new to ceramics) how to make a pinch pot.

20. Demonstrate how to safely use all equipment.

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Project Leader's Signature of Completion: \_\_\_\_\_

Date: \_\_\_\_\_

Club Leader's Signature of Completion: \_\_\_\_\_

Date: \_\_\_\_\_

## **Points to Remember:**

- Choose greenware with sharp detail and proper thickness.
- The ceramic clay body must be fired at a proper temperature to ensure proper maturity.
- Read labels on all containers for important information.
- Follow instructions closely.
- Follow the safety rules to prevent any health hazards and/or complications with your project.
- Keep accurate and neat notes to enter to your Ceramics e-Record supplement sheets.
- Any unit may be repeated with new skills learned.
- The unit criteria, for the unit in which you are enrolled, must be met.
- More than one unit may be completed in one 4-H year.
- The Ceramics e-Record must be completed per unit.
- **Be Creative!!! HAVE FUN!!!**

## **SAFETY RULES**

- ✓ **Do not have food and/or drink at your work area.**
- ✓ **Keep your hands away from your mouth and eyes.**
- ✓ **Do not blow clay dust from ceramic piece.**
- ✓ **Be sure your hands are clean before handling your piece.**
- ✓ **Always work in a well ventilated room when you are working with overglazes.**
- ✓ **Wear an apron to protect your clothing.**

SINCE



1902

# UNIT 1

## GLAZE

### You are ready to begin!

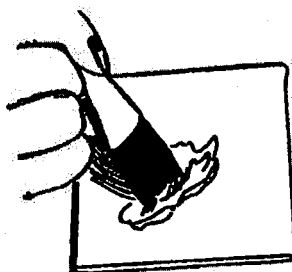
#### Steps:

- (A) Purchase a 4 or 6 inch tile.
- (B) Prepare work area with suitable covering (i.e. newspaper, butcher paper, old towel, etc.).
- (C) **Follow the safety rules.** (Refer to page 3)
- (D) Clean tile using proper tools. (Refer to page 4)
- (E) Initial and date tile on the bottom for identification. This is a requirement.
- (F) *Senior and/or repeating members may leave the tile in greenware form and go to the next step.*
- (G) *With a pencil, divide the tile into 4 sections. Using a sgraffito tool incise the pencil lines. Be creative!!*
- (H) Bisque fire your tile according to the glaze label firing instructions.
- (I) Keep accurate notes as you proceed.

\*\*\*\*\*

- (J) Prepare your work area with suitable covering.
- (K) **Remember the safety rules.** (Page 3)
- (L) Using a damp sponge clean kiln dust from your tile.
- (M) *Senior/repeating members will choose two or more different glazes, (e.g. gloss, satin, matte, or crystal). Using your harmony color wheel, choose the colors you would like for your tile. Your leader will guide you.*
- (N) Apply recommended number of coats of glaze, as stated on the glaze label, on your tile. Be sure each coat is dry before applying the next coat. Be sure to glaze the bottom of your tile. The bottom of your piece should look as nice as the top. Your leader will guide in the application of glazes.
- (O) Have your piece fired to label recommended cone size.
- (P) Have stilt marks removed. After having the stilt marks removed, slide piece over a newspaper. If stilt marks scratch or tear the paper, you will need to remove the sharp edges again. You may want to use felt feet over the removed stilt marks. **Do not use full coverage of felt over the entire bottom.** The judge must have access to the bottom of pieces for close inspection.
- (Q) Judge your project using information on page 7 as a guide.
- (R) Complete the Ceramics e-Record supplement sheets.

\*\*\*\*\*



# UNIT 1

## GLAZE

### PROJECT 2

#### Basic Information:

- (1) Project 2 for the first year member will serve as a functional piece. You may use it as your water cup throughout your ceramic projects.
- (2) *Members repeating this unit may want to do a brush holder or another greenware piece of his/her choice. Be creative!!!*
- (3) This is a required learning piece.

\*\*\*\*\*

#### Suggestions:

*For senior and repeating members:*

- (1) *Try design work by using glazes over a Matte or Satin glaze. This is called a Majolica technique.*
- (2) *Seek more techniques from ceramic publications and/or your local ceramic studio.*

#### Steps:

- (A) Prepare work area.
- (B) **Remember the safety rules.** (Refer to Page 3)
- (C) Carefully clean seam lines from your greenware with proper tools. The circumference of the cup lip must be the same width. This is accomplished as you smooth the rim.
- (D) Have your piece fired according to the label instructions.
- (E) Keep accurate notes as you proceed.

\*\*\*\*\*

- (F) Prepare work area.
- (G) After cleaning your bisque with a damp sponge, roll one "rolling coat" of glaze inside your piece. Your leader will help you mix your glaze for a rolling coat. Be sure to leave your piece upside down until dry, resting the rim of the piece on a clean cleaning tool or pencil. This will avoid over glazing the inside. Continue by glazing the outside and bottom. Do not over - lap your outside glaze onto your inside glaze. It will cause the glazes to bleed into each other. Be sure each coat is dry before beginning your next coat. You may use the same color/s as you used on the tile.
- (H) Fire according of the label instructions.
- (I) Remove the stilt marks on your piece.
- (J) Enter information on your Ceramics e-Record project and expense supplement sheets.

\*\*\*\*\*

# UNIT 1

## GLAZE

### Project 3

#### Basic Information:

- (1) **GREAT!!!** You have completed projects 1 and 2.
- (2) Skills learned:
  - (a) Proper cleaning of greenware.
  - (b) Application of glaze of your choice.
  - (c) Rolling glaze inside a piece.
  - (d) Butting (or meeting) two glazes.
- (3) You are now ready to complete project 3 which may be your exhibit piece.
- (4) If time permits you can complete several projects. You may want to do an evaluation on each of your pieces that are exhibit consideration. This would let you determine which would be your best piece for exhibit.

#### Suggestions:

- (1) You may use the same skills learned on your third project or refer to Ceramic Knowledge and Goals checklist to learn and complete a new skill.
- (2) Before choosing your project 3 piece, and if you have the opportunity, go to several ceramic studios to see what is available.
- (4) Look through ceramic publications for technique ideas. Check references on page 70.
- (5) Be sure to stay within your unit medium, (Glaze).
- (6) You may want to change your piece by carving a design into the dry greenware or by cutting a design into wet greenware. You may change the design of your piece as you like. This is considered a greenware adaptation, but is still within your unit if you use glaze as your medium. Be sure the greenware is casted a little heavier than normal. Extra care will be needed because there is a degree of risk in breakage. **This is not recommended for ages 9 thru 13 years, but would be an excellent technique for senior members.**

#### Steps:

- (A) Follow cleaning steps as outlined on page 4.
- (B) Decide on the technique you wish to achieve. Your leader will guide you. If you do not have a ceramic project leader, contact your Extension Agent so he/she may be able to connect you with a local project leader or a knowledgeable person. If neither is available, see if the Ceramic Leaders manual is available for more advanced information.
- (C) Keep accurate notes as you proceed.

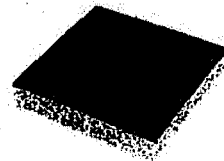
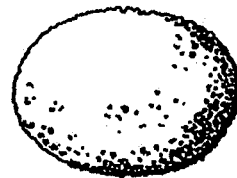
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# UNIT 1 GLAZE

## CERAMIC KNOWLEDGE

## CHECK LIST:

Identify the following tools/brushes:



What I learned about the care of my ceramic brushes: \_\_\_\_\_

**Congratulations!!** By completing 3 or more projects, exhibiting Ceramics e-Records and one project you have completed this year's Unit.



# UNIT 1

## GLAZE

Ceramic Knowledge and Goals checklist:	New skills I have learned.	Skills I want to learn or improve.
Removing seam lines and imperfections, from the greenware, with the proper tools.		
Altering the greenware pattern for a special effect.		
Application of an Opaque gloss glaze with an Ox hair or Nylon glaze brush.		
Application of a Semi-Opaque gloss glaze with a Nylon glaze brush.		
Application of a Transparent and/or Semi-Transparent glaze with a Nylon glaze brush.		
Application of an Art gloss glaze with an Ox hair or Nylon glaze brush.		
Application of an Art Satin and/or Matte glaze with a Nylon glaze brush.		
Application of a Crystal Gloss, Satin and/or Matte glaze/s with a Fan brush.		
Application of Crackle Gloss, Satin and/or Matte glaze/s with a nylon brush.		
Application of Woodgrain Satin and/or Matte glaze/s with an Ox hair or Fan brush.		
Application of a Textural glaze using a brush, paint knife, sponge or other instruments.		
Application of a Special Effect glaze using a brush. paint knife, sponge or other instruments.		
Antiquing with glazes.		
Application of a combination of different color glazes, one over another, for a mingled or multi-colored effect.		
Application of a combination of different color glazes, a deliberate placement of colors, controlling the colors.		
Application of glaze contained within a design area (i.e. a figurine with different colored areas).		
Sgraffito through glaze/s using two or more glaze colors.		
Inlay of glazes into certain areas of pattern (i.e. a Mosaic).		
Majolica: A glaze decoration over a Matte or Satin glaze. <u>Limited amount of underglaze for out lining only will be accepted.</u>		

**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.**

**Check the glossary for more information on each of the skills.**

# UNIT 2

## UNDERGLAZE

### Requirements:

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

### Basic Information:

#### Underglazes:

- (1) Are usually applied to greenware and fired before glaze is applied.
- (2) May be applied to bisque (but rarely done because of difficulty in application and poor end results). This is not recommended unless underglaze label suggest this type of application.
- (3) May be thinned, with underglaze media or water, for desired consistency.
- (4) May be intermixed to create color variations. Refer to types of underglazes.
- (5) May be applied with brush, sponge, airbrush or a variety of other available tools.
- (6) May be used in a sgraffito technique.
- (7) Must be applied smoothly because they do not move in firing.
- (8) Require specific cone firing as indicated on underglaze label.

#### Types of the most common underglazes:

- (1) Opaque underglaze is usually made from a clay base, and should not be mixed with different kinds of underglaze, or any of the glaze types. It is mostly used for solid coverage, and can be thinned with underglaze medium or water.  
This type of underglaze works well for:
  - (a) Figurines.
  - (b) Blocking in design work (i.e. as eyes, flower petals, etc.).
- (2) Transparent underglaze is made with concentrated colorants, and less clay base. It is usually thinned with an underglaze medium or water.  
This type of underglaze works well for:
  - (a) Brush stroke work.
  - (b) Tinting specialty glazes (i.e. Froth, Snow, etc.).
  - (c) Airbrushing.
- (3) Specialty underglaze is usually made with a frit base. It can be mixed with its own kind. Very rarely can it be mixed with other ceramic media. The most popular colors in this type are red and orange. It is recommended to follow the manufacturer's instructions for proper application.

There are new and improved ceramic media introduced daily. **It is very important to read all labels for recommended application and firing instructions.**

*Have your project leader, parent and/or ceramic studio help you choose your greenware and underglazes. They will be able to assist you in your choices and guide you.*

\*\*\*\*\*

# UNIT 2

## UNDERGLAZE

### PROJECT 1

#### Basic Information:

- (1) This project will be a lesson in making basic (human) eyes.
- (2) First year members in Unit 2 will use a tile for this learning experience.
- (3) *Repeating members and seniors may use any plain surface piece.*
- (4) This project will be considered as one of your required pieces. **Learning projects are usually not entered in competition.**
- (5) You may be using tools, brushes, and a glazed tile from Unit 1.
- (6) Other tools and brushes you may need to purchase:
  - (a) Sgraffito tool.
  - (b) Round brush (#2 or #4).
  - (c) Liner brush (#1).
- (7) You will learn more new ceramic terms from your leader and/or the glossary (page 65).
- (8) Keep accurate notes as you proceed.

#### (Eyes for you)



Looking to one side

Looking straight ahead

**Both eyes must look the same direction.**

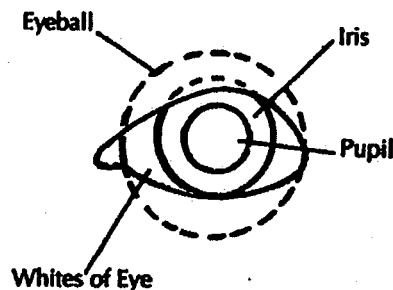


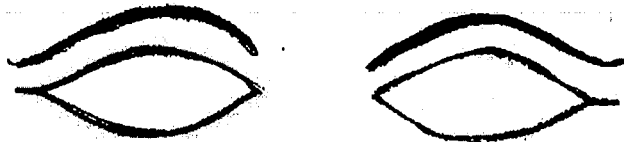
Illustration by Sharon Kinzie

# UNIT 2

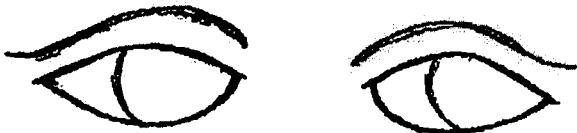
## UNDERGLAZE

### Steps:

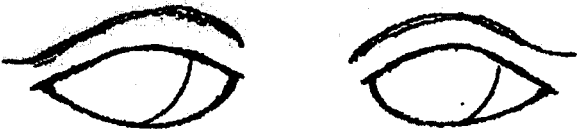
- (A) Select suitable greenware (tile or any flat surface piece).
- (B) Prepare work area with suitable covering.
- (C) **Follow the safety rules.** Refer to page 3.
- (D) Clean greenware as outlined on page 4. Initial and date the bottom of piece for identification.
- (E) After you have checked your piece for seam lines and imperfections, wipe the piece down with a damp sponge to remove the excess dust.
- (F) Place opaque flesh color underglaze on a glazed tile (your work tile).
- (G) Apply even coats with a one inch nylon glaze brush over entire piece.  
Read label for number of coats recommended. Let your piece dry completely.
- (H) Using a dull pencil, lightly sketch in three sets of human eye shapes. Also, you may place tissue wrapping paper over the eye illustration and trace the out-lines, using a dull pencil. Place the pattern on your piece and trace with a "Extra Fine Pilot pen". The ink will go through the tissue and leave the out-line on your piece. **You must use a pilot pen when doing this.**
- (I) Block inside the eye with 3 coats of opaque white underglaze using a Round brush. Let your piece dry completely.



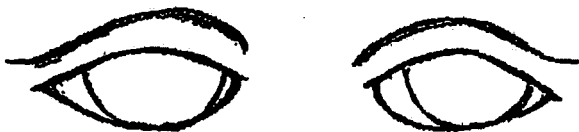
- (J) Sketch in the iris (the colored part of the eye) using a dull pencil. Refer to the illustrations for the placement of the iris.



Looking right.



Looking Left.



Looking straight ahead.

# UNIT 2

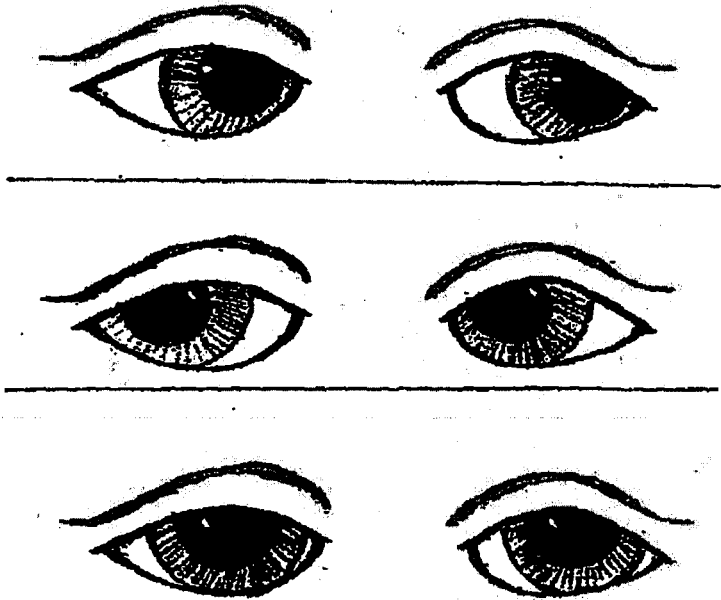
## UNDERGLAZE

### Steps Cont:

- (K) Paint in the iris with 3 coats of desired opaque underglaze color using a Round brush (i.e. Blue or brown tones). Let your piece dry completely.
- (L) Using the dull pencil, sketch in the pupil (black part of the eye). Refer to the placement of pupil from the illustrations below. Notice that the pupil is placed toward the top of the eye. The eyelid covers about  $\frac{1}{4}$ <sup>th</sup> of the eye.

Be sure to place the highlights on the same side of each eye.

The highlight is the reflection of light in the eyes.



- (M) Place the highlight in the eyes with white opaque underglaze with a Liner brush.  
*The members who are repeating Unit 2 and seniors may sgraffito through damp underglaze into greenware to indicate highlights.*  
Be sure to place the highlights on the same side of each eye.
- (N) With the liner brush and black underglaze place a line over eyes for lashes.  
*Repeating members and seniors may brush in the individual lashes.*
- (O) You may want to put a dot of pink in the tear duct area.
- (P) Clean brush with soap and water. Rinse and reshape the brush.
- (Q) Have the piece fired to the proper cone.

\*\*\*\*\*

- (R) Prepare work area.
- (S) After cleaning the piece with a damp sponge apply two coats of clear glaze.
- (T) Clean the glaze brush with soap and water. Rinse and reshape the brush.
- (U) Fire to the proper cone.
- (V) Remove stilt marks.
- (W) Complete your Ceramics e-Record project and expense supplement sheets.
- (X) Evaluate your project using the Unit 2 guide line for judging on pages 7 and 8.

\*\*\*\*\*

# UNIT 2 UNDERGLAZE

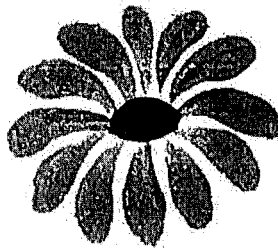
## PROJECT 2

**“Please Don’t Eat the Daisies”**



### **Basic Information:**

- (1) Project 2 is a brush stroke study using translucent underglazes.
- (2) Learning brush strokes is similar to learning to play a musical instrument. You may want to practice the basic brush strokes, on paper or on a clear polypropylene sheet protector, until you feel comfortable to apply your learned skill on your piece. Try designing several Daisy patterns on paper to practice the brush stroke.
- (3) This project will be considered as one of your required pieces. **Learning projects are usually not entered in competition.**
- (4) You may need to purchase a Round brush (#4 or #6).



Brush stroke illustration

**Place a polypropylene sheet protector over the brush stroke illustrations and practice the brush strokes. After you fill the page, just wash the protector off and repeat the process. Remember that you do not need to stay within the boundaries of the detail. This is known as “free brush”. Perseverance is very important and the reward comes with your sense of accomplishment.**

# UNIT 2

## UNDERGLAZE

### Steps:

- (A) Select suitable greenware (i.e. box, small vase or plate).
- (B) Prepare work area.
- (C) **Follow safety rules.** (Page 3)
- (D) Clean greenware with proper tools (Initial and date the bottom of piece/s for identification).
- (E) After you have checked for seam lines and imperfections, remove excess dust from your piece using a damp sponge.
- (F) Trace or sketch a Daisy pattern on to the piece (if making a box, use the box lid).  
*Members repeating this unit or seniors may want to design their own pattern.*
- (G) Wash the new brush with soap and water. Rinse the brush and reshape.
- (H) Place a translucent yellow underglaze on your work tile.
- (I) Dilute the underglaze, with underglaze medium or water, to a canned milk consistency.
- (J) Rinse brush again and shape by pulling the brush across a paper towel.
- (K) With a well loaded brush start at the top of the petal and use a point, pressure and pull back to a point brush stroke. In doing this, you are creating a "fat rounded" top, with pressure. You are then easing the presser to form the more narrow part of the petal, and ending by pulling the brush from the object to make the final point.  
A delicate hand is better than a heavy hand. With practice you will learn how much pressure to put on your brush. Keep turning your piece so you are pulling your brush stroke toward yourself. You may need to rinse your brush and thin your underglaze often.
- (L) Clean the work tile well. Dilute a orange yellow translucent underglaze to a canned milk consistency.
- (M) Using the handle end of the detail brush, fill the center (the calyx) with dots of orange yellow.
- (N) Place yellow green translucent underglaze on your clean glazed work tile and dilute to a canned milk consistency.
- (O) Fill in the leaves using the same brush strokes as used on the petals.
- (P) Dilute a small amount of black green translucent underglaze on the clean work tile. Thin to light cream consistently.
- (Q) Using a #1 liner outline petals and leaves. Place dots inside calyx. Refer to illustration for placement. Paint stem from flower downward toward bottom.  
Using the liner brush put your name or initials beside your daisy. When making fine lines, your brush must be vertical. As you use very little pressure on your brush, you will be able to make nice thin lines.
- (R) Clean the brush and reshape.
- (S) Fire to the proper cone (Be sure to have the box lid fired onto box bottom).

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# UNIT 2

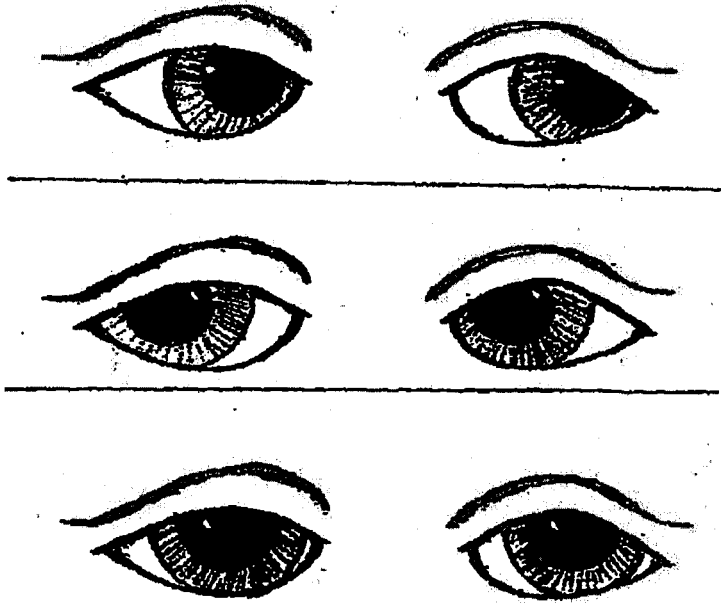
## UNDERGLAZE

### Steps Cont:

- (K) Paint in the iris with 3 coats of desired opaque underglaze color using a Round brush (i.e. Blue or brown tones). Let your piece dry completely.
- (L) Using the dull pencil, sketch in the pupil (black part of the eye). Refer to the placement of pupil from the illustrations below. Notice that the pupil is placed toward the top of the eye. The eyelid covers about  $\frac{1}{4}$ <sup>th</sup> of the eye.

Be sure to place the highlights on the same side of each eye.

The highlight is the reflection of light in the eyes.



- (M) Place the highlight in the eyes with white opaque underglaze with a Liner brush.  
*The members who are repeating Unit 2 and seniors may sgraffito through damp underglaze into greenware to indicate highlights.*  
Be sure to place the highlights on the same side of each eye.
- (N) With the liner brush and black underglaze place a line over eyes for lashes.  
*Repeating members and seniors may brush in the individual lashes.*
- (O) You may want to put a dot of pink in the tear duct area.
- (P) Clean brush with soap and water. Rinse and reshape the brush.
- (Q) Have the piece fired to the proper cone.

\*\*\*\*\*

- (R) Prepare work area.
- (S) After cleaning the piece with a damp sponge apply two coats of clear glaze.
- (T) Clean the glaze brush with soap and water. Rinse and reshape the brush.
- (U) Fire to the proper cone.
- (V) Remove stilt marks.
- (W) Complete your Ceramics e-Record project and expense supplement sheets.
- (X) Evaluate your project using the Unit 2 guide line for judging on pages 7 and 8.

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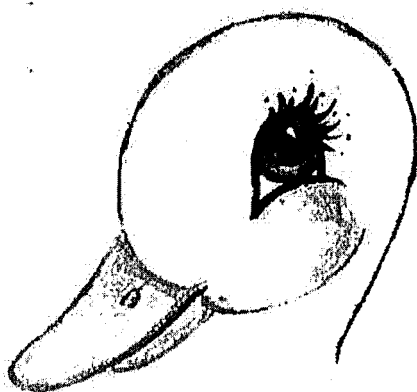
# UNIT 2

## UNDERGLAZE

CERAMIC KNOWLEDGE AND GOAL CHECKLIST:	New skills I have learned.	Skills I want to learn or improve.
Altering the greenware pattern for a special effect.		
<u>Detail work</u> with Opaque underglaze on an embossed piece (using a figurine or highly detailed piece).		
<u>Antique</u> with underglazes (usually with a detailed piece) .		
<u>Polish</u> with Opaque underglazes (Southwest Indian technique that has been passed down for generations).		
<u>Texture</u> technique (using thickened Opaque underglaze to form a textured pattern or background).		
<u>Veiling</u> technique (designing work using Translucent underglaze and a sponge).		
<u>Sgraffito</u> technique (scratching a design through an underglaze).		
<u>Stencil</u> technique (a cut out pattern used to apply a design by brushing, sponging or air brushing).		
<u>Brush work</u> with Transparent underglaze (a design where the strokes of the brush are apparent).		
<u>Simulated China painting</u> (using Transparent underglazes, double and triple loading the brush with several colors to give a feeling of China painting).		
<u>Majolica</u> (underglaze design applied over Satin or Matte glaze).		
<u>Air Brush</u> (a device generated by an air compressor). Solid coverage can be achieved, as well as design work and subtle shading.		

**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.**

**Check the glossary for more information on each of the skills.**



Artwork by Sharon Kinzie

# UNIT 3

## OVERGLAZE

### Requirements:

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

### Basic Information:

#### Overglazes:

- (1) Are usually applied over a glaze.
- (2) May also be applied over polished Porcelain bisque.
- (3) Are mostly used for decorative purposes. Most overglazes, fuse to, but do not become part of the glaze. For that reason, they are mainly used for decorative rather than utility items. **Check with the manufacturer for food safe information.**

#### Types of the most common overglazes:

- (1) Lustres:
  - (a) Gold
  - (b) Platinum
  - (c) Copper
  - (d) Mother of Pearl
- (2) Decals
- (3) Enamel
- (4) China paste
- (5) China paint



**It is very important to read all labels for recommended application and firing instructions.**

*Have your project leader, parent and/ or ceramic studio help you choose your greenware and overglazes. They will be able to assist you in your choices and guide you.*

Keep accurate notes as you proceed.

Evaluate each of your projects using the guide for judging on page 8.

# UNIT 3

## OVERGLAZE

### PROJECT 1

#### Basic Information:

- (1) You will be learning how to apply a decal and Mother of Pearl.
- (2) Most decal designs are made with China paint and/or enamels on a film. The film fires away and the design fuse onto the glaze.
- (3) If using decals and Mother of Pearl on the same piece, always apply and fire the decal first. Decals require a hotter firing than the Mother of Pearl.
- (4) *Repeating members and seniors may create an original design using a variety of different patterns and sizes when using decals.*
- (5) This project will be considered as one of your required pieces. **Learning projects are usually not entered in competition.**
- (6) You may be using some of the tools from Unit 1 and Unit 2.
- (7) Other tools and brushes you may need to purchase:
  - (a) Squeegee for applying decals.
- (8) You will learn more new ceramic terms from your leader.

#### Steps:

- (A) Select suitable greenware (tile or any smooth surface piece).
- (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 the piece.
- (E) Have your greenware fired to the proper cone size.
- (F) Keep accurate notes as you proceed .

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- (G) Prepare work area.
- (H) After cleaning the kiln dust from the piece, apply gloss glaze of your choice, with your glaze brush.
- (I) Clean your brush with soap and water. Rinse and reshape the brush.
- (J) Fire your piece to the proper cone size.

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- (K) Prepare work area.
- (L) Clean the tile to be decorated, and the work tile, with denatured alcohol.
- (M) Place the decal in water until decal curls up tightly. The water should be room temperature or luke warm.
- (N) Remove the decal from the water and place on the cleaned work tile until the decal unfurls.
- (O) With the backing paper still in place, position the decal face up on the piece.  
Holding the decal in position with your thumb, gently slip out the backing paper.

# UNIT 3

## OVERGLAZE

- (P) If you are having a problem, removing the backing paper, ask your leader for helpful suggestions.
- (Q) Slide the squeegee over the backing paper to remove some of the adhesive. This will let the squeegee slide across the decal without tearing it. Work out all of the water and air bubbles, working from the center out, in all directions.
- (R) Clean the squeegee with soap and water, rinse and let it dry.
- (S) Allow decal to dry twelve hours before firing. Read decal packaging for proper firing cone.
- (T) Check the stilt marks and remove as needed.
- (U) Complete your E-record and expense supplement sheets.
- (V) Evaluate your project using the Unit 3 guideline for judging on page 8.

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### Steps for Mother of Pearl:

- (A) Wash the new brush with soap and water, at home, so it has time to dry before the next workshop. Label your brush "Mother of Pearl".
- (B) Prepare work area.
- (C) Clean the glazed project piece, the work tile, and the camel hair round brush with the denatured alcohol and let dry.
- (D) Wear rubber gloves or use paper towel while placing the piece on a turntable.
- (E) Load the round camel hair brush with Mother of Pearl, clean one side of the brush on the side of the bottle, to remove excess. **The brush should not be loaded to the metal ferrule.**
- (F) With a light touch, swirl the Mother of Pearl in a small circular motion. Turn the turntable as you work. Reload your brush when needed. **Do not over-work the brush strokes.** Let the piece dry twelve hours before firing to proper cone (follow manufactures instruction). Be sure to use paper towels or wear gloves when moving the dry Mother of Pearl piece. Ask your leader to give you more information if needed.
- (G) Clean your brush in clean essence, then alcohol and finally with soap and water. Store this brush, alone, away from your other brushes.

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- (H) Check the stilt marks and remove as needed.
- (I) Complete your E-record.
- (J) Evaluate your project using the Unit 3 guideline for judging on page 8.

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## PROJECT 2

### Basic Information:

- (1) You will be learning how to apply Mother of Pearl.
- (2) If using decals and Mother of Pearl on the same piece, always apply and fire the decal first. Decals require a hotter firing than the Mother of Pearl.

# UNIT 3

## OVERGLAZE

- (3) This project will be considered as one of your required pieces. **Learning projects are usually not entered in competition.**
- (4) You may be using some of the tools from Unit 1 and Unit 2.
- (5) Other tools and brushes you may need to purchase:
  - a. Turntable to aid you when you are applying lustres
  - b. Deerfoot Stipler brush designed to be used with Mother of Pearl. If not available, camel hair round brushes may be used.

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### Steps:

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

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- (G) Prepare work area.
- (H) After cleaning the kiln dust from the piece, apply gloss glaze or glazes of your choice depending on your piece, with your glaze brush.
- (I) Clean your brush with soap and water. Rinse and reshape the brush.
- (J) Fire the piece to the proper cone size.

\*\*\*\*\*

- (K) **Wash the new brush with soap and water, at home, so it has time to dry before the next workshop. Label your brush "Mother of Pearl".**
- (L) Prepare work area.
- (M) Wear rubber gloves or using paper towels when working with your piece.
- (N) Clean the glazed piece, the work tile, and the deerfoot stipler or the camel hair round brush with denatured alcohol and let dry.
- (O) Wearing rubber gloves or using paper towels place the piece on a turntable.
- (P) Load the deerfoot stipler or camel hair brush with Mother of Pearl. Clean one side of the brush on the side of the bottle, to remove excess. **The brush should not be loaded to the metal ferrule.**
- (Q) With a light touch, swirl the Mother of Pearl in a small circular motion. Turn the turntable as you work. Reload your brush when needed. **Do not over-work the brush strokes.** Let the piece dry twelve hours before firing to proper cone (follow manufacture's instruction). Be sure to use paper towels or wear gloves when moving the dry Mother of Pearl Piece. Ask your leader to give you more information if needed.
- (R) Clean your brush in clean essence, then with denatured alcohol and finally with soap and water. Store this brush, alone, away from your other brushes.

# UNIT 3

## OVERGLAZE

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What I learned in this unit:

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

<b>CERAMIC KNOWLEDGE AND GOALS CHECKLIST:</b>	<b>New skills I have learned.</b>	<b>Skills I want to learn or improve.</b>
Altering the greenware pattern for a special effect.		
Making my own design using several decals.		
Combining several overglazes.		
Application of Enamels.		
Application of China Paste.		
Application of China Paint.		
Application of an Overglaze not listed.		
Name of Overglaze:		

**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.**

**Check the glossary for more information on each of the skills.**

## **I'm a 4-H Project Leader: Now What Do I Do?**

### **How do I know who is in my project?**

- Your club organizational leader will provide you with the names, addresses and phone numbers of the members enrolled in the project for which you are the leader.
- If you are working on the county level, contact the UCCE for the list of project members.
- The organizational leader may indicate to you if any of the youth have special needs. At your first project meeting, note any other youth that may have special needs.
- You may wish to consult with the parent or your 4-H Youth Development Agent as to how to work with a special needs child.

### **How often should I hold project meetings?**

It is recommended you hold 4-6 meetings that each last 1½ to 2 hours in length. Some projects require more meetings or a longer meeting time to accomplish your goals. Some projects, such as leather craft, may lend themselves to individual project work as members progress on their projects. In this case, you should hold several introductory meetings for all members and then set up a schedule of time for them to sign up for individual help.

### **When do I start?**

Get started as soon as possible! Members' interest in a project is most keen when they are signing up for a project and when they get their project books.

### **How do I cover the cost of project meetings?**

- There is a wide variety of means for covering the cost of project meetings. Some methods used include:
- Each member pays for their share of the expenses or provides a portion of the supplies.
- The club agrees to cover expenses using funds from their treasury. Approval in advance is needed for this.
- Members and leaders can solicit donations/supplies from area businesses.
- Sometimes funds from sources outside your club may be available to cover your project meeting costs.

### **How do I establish a project meeting schedule?**

First, determine when you are available to work with project members. Then determine an initial project meeting date by consulting with your project members.

Publicize the date using one of the following means:

- County and/or club newsletter
- Club meeting or leader association meetings
- Postcards or phone calls to project members

You may not be able to schedule an initial meeting that everyone can attend. Establish a time to meet with those unable to attend before you hold your second project meeting.

### **Where do I hold project meetings?**

Typically project meetings are held at project leader homes, schools, or community buildings. For more information on facility adaptability and liability concerns contact your 4-H Youth Development Agent.

### **What safety precautions do we need to consider?**

Consider the type of safety issues your particular project involves. Request and secure necessary safety items such as ear protection, eye protection and head protection.

### **How do I let others in my club or other clubs know I am a project leader?**

Prior to enrollment ask for time on your club's meeting agenda to let families in your club know you're a project leader and to share some things the kids could do in the project if they enrolled in it. When the project materials are handed out, take the opportunity to inform or remind members that you are their project leader and set an initial meeting date with the group. If no one in your club is in your project, you may wish to offer your services to a neighboring club. Talk to your club organizational leader or county 4-H Youth Development agent about this opportunity.

### **How do I prepare for the first meeting?**

You may want to establish a 4-H resource box where you keep your project materials and any additional resources you will be using. Take time to become familiar with your project literature and talk to others who were project leaders for this project to find out what activities the members enjoyed.

### **What should I do at the initial project meeting?**

- At the initial project meeting, here are some ideas of what you might want to cover:
- Find out what the members want to learn and accomplish in the project. The project literature is an excellent source of ideas.
- Review the safety practices that members will need to follow.



- Do an introductory activity related to the project so the members get to know one another
- Have a small project the members can complete and take home
- Talk about how the project meeting supplies will be paid for. Experienced leaders have found it easiest to charge a small fee to cover the cost of the expenses.
- Assess when members are available for additional meetings. You may wish to ask the parents or members to bring along their calendars of family activities.
- Encourage parents to participate in project meetings, especially the initial meeting.

### **What does a typical project meeting look like after the initial orientation?**

Use the experiential learning model (found in the introductory pages of your Helper's Guide) to plan your project meeting. The project helper's guide will provide suggestions for designing a project meeting. Here are some suggestions for each section of the model:

#### **Do**

- Plan an activity to focus the project members on what they'll be doing today. Work on the project for that meeting.

#### **Reflect**

- Review the process completed
- Discuss what worked and didn't work.
- Talk about how any problems that arose were solved.
- Assist members in documenting their project work for inclusion in their record books/portfolios.

#### **Apply**

- Ask the project member the following questions:
- What else have you seen that is similar to this?
- How can you apply what you learned today to other situations?

### **What resources are available to help me?**

- 4-H Project Literature – You will receive project literature through your 4-H club or the UW-Extension office. Typically there is a helper's guide and member literature for three to four levels.
- Other People in my Club & County – There are a number of people in your county who would be willing to share project ideas and tips with you.

These include:

- Project leaders in other clubs
  - County Staff
  - Older youth who have been involved in the project
- 
- Media Collection & Public Libraries – Additional resources can be obtained from the Cooperative Extension Media Collection. They have videos, skillathons, displays and resource packages available to support a variety of projects. There is a user fee per item you or your club will be responsible for. You can view their catalog at their website <http://www.uwex.edu/ces/media/>. Check with your local public library to find out what resources they may have or that you can obtain through inter-library loan.
  - 4-H Website – Wisconsin 4-H is continually adding more information and activities to their website. Visit this site at [www.uwex.edu/ces/4h/onlinepro/](http://www.uwex.edu/ces/4h/onlinepro/). You may wish to check out websites from other state 4-H programs also.
  - Volunteer Leaders Conferences – Review each issue of your county's newsletter to learn about training sessions for project leaders offered by your county, district or at statewide events. Sessions focusing on new project literature are typically offered at the State 4-H Volunteer Leader Conference held every other year. Periodically statewide conferences focusing on specific project areas are offered in addition to sessions at the volunteer conferences. You can also exchange ideas with other leaders at statewide Field Day.
  - Field Trips – Youth always enjoy the opportunity to see firsthand how things are done and how they work. Consider taking your project group on a field trip or tour of a local business or company to enhance their project experience. An example would be taking your dairy members to a cheese factory or your foods group to a local bakery.
  - Local Experts – Bring in a local "expert" to share their ideas and experiences with your group. One example would be asking a Master Gardener to share information on choosing perennial or trimming shrubs at one of your project meetings.
  - Magazines – Many leaders have found creative ideas to supplement those in the project literature in magazines they have or those at the public library.

### **How can I incorporate activities not included in the project guide?**

We encourage you to use the ideas in the project literature as they have been successfully used with youth. If you have some additional activities you would like to incorporate, consider the following criteria:

- Of interest to kids
- Developmentally appropriate
- Incorporate the experiential learning model
- Youth and adults are involved in determining what will be done
- Enhances the development of member life and project skills
- Research based source of content utilized

### **What is the relationship between project work and the county fair?**

The County Fair is an opportunity for an independent evaluation of life and project skills a member learned through completing a project. County fair entries typically match the activities included in the project literature and may include other activities that are being emphasized in your county. One of your roles is to help maintain the focus of members and parents on the goal of 4-H, which is to develop blue ribbon kids. Talk with members about what they learned about each of their fair entries from the judging process. Help members celebrate their accomplishments regardless of the color of ribbon each project member received at the fair. This may be done through individual encouragement or at a meeting following the fair. While entering and displaying a project at the County Fair is the traditional method of public affirmation, there may be other means of exhibition such as a club tour, open house, community celebrations or others.

### **Who can I go to if I need someone to help me during the project meetings?**

If you are leading beginning level project meetings, ask older members in the project to help you. This is a great leadership experience for them! Parents are another excellent source of help. Don't hesitate to ask them to stay for the meeting and be actively involved in their child's project work.