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Sensational Ceramics

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Ways to integrate Art using a variety of Clays... Natural and Man-made to celebrate and culminate your curriculum!

... by Michael Flaum, Art Educator
mflaum@dadeschools.net

Several ways to create a fun and meaningful project in support of your studies in any classroom.

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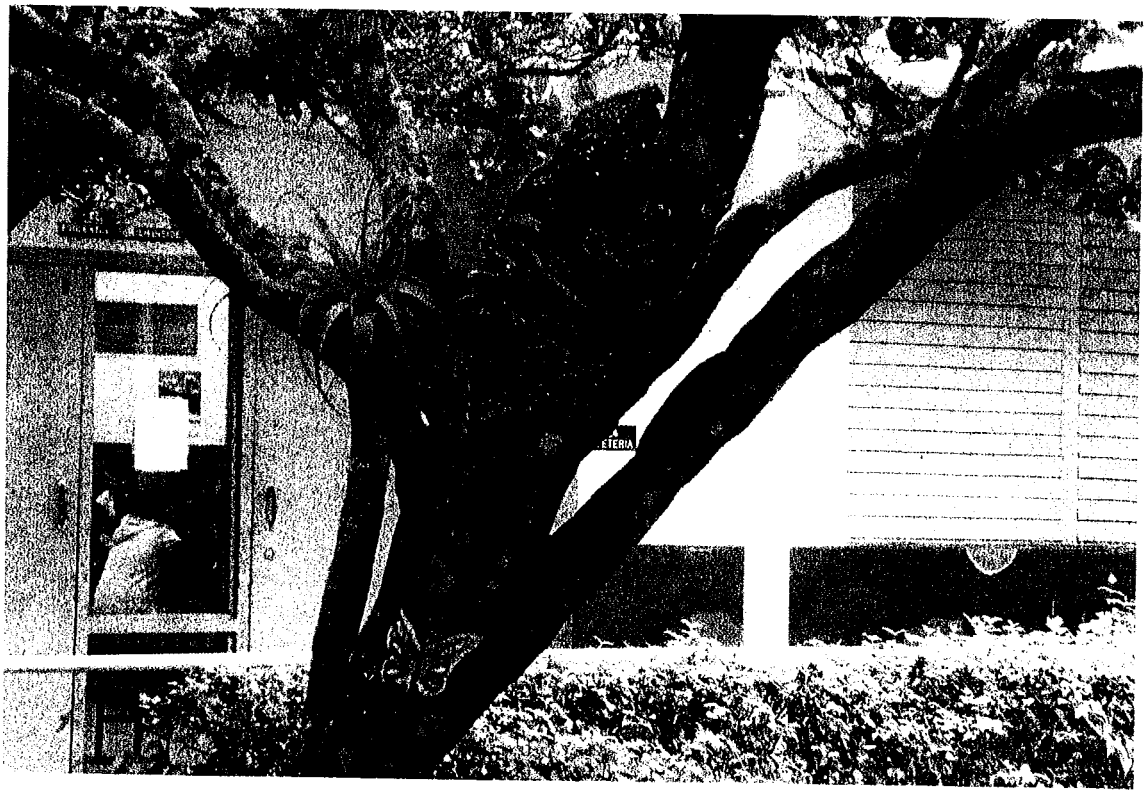


GOALS AND OBJECTIVES:

1. Students will learn about creating art in the form of ceramics or clay relief sculpture as a Way of integrating lessons in art with Science,Reading, Music, Writing Math etc.

2. Students will develop an understanding of the science of natural clay as well as man-made products to create sculpture.
3. Students will create their own ceramic or man made (model magic) sculptures related to their areas of study or themes.
4. Students shall participate in the creating of a larger group clay project that will be displayed proudly in the school.
5. The school community will have a larger appreciation for their various areas of study as illustrated in their three dimensional clay depictions of their themes.

STANDARDS: Competencies for Visual Arts...

VA.2.H.1.1 – Identify Examples in which artists Works have been created based on cultural and life experiences

VA.2.H.2.1 – Identify differences or similarities in artworks across time and cultures.

VA.2.W.1.3 – Explore art from different time periods and cultures as sources for information

VA.3.H.1.3 – Identify and be respectful of ideas important to individuals, groups or cultures that are reflected in their artworks.

VA.3.0.2.1 – Use creative and innovative ideas to complete personal artworks.

Sensational Ceramics Overview

By Michael Flaum, Art Teacher

This Booklet will give you as a teacher Background information including the History of Ceramics, Ceramic Processes and Several Lessons you may use to integrate art as a Culminating Activity to any lesson.

Lessons include Pinch Pots, Coil Pots, and Relief Designs in Clay . Historical References and Details have been provided for each activity.

Whenever I tell students they are creating a " Clay Project" they erupt in cheers. Clay is fun, easy to mold and manipulate and leaves the children with a

concrete memory that reinforces the unit of study with a tangible art piece that they will cherish. Remember, every art piece is special because every human being's touch is different. Any time an art piece is hand built there will be human imperfections ..but that is what gives the very character and individuality to the piece. Whether you use self- drying clay or earth clay the joy of creating with clay is inevitable. I hope you enjoy the process and prospect of Sensational Ceramics.... The celebration of Art and celebrating your area of study with a three dimensional representation made by your students. Enjoy!

Ceramic History

Archeologists have uncovered human-made ceramics that date back to at least 24,000 BC. These ceramics were found in Czechoslovakia and were in the form of animal and human figurines, slabs, and balls. These ceramics were made of animal fat and bone mixed with bone ash and a fine claylike material. After forming, the ceramics were fired at temperatures between 500-800°C in domed and horseshoe shaped kilns partially dug into the ground with loess walls. While it is not clear what these ceramics were used for, it is not thought to have been a utilitarian one. The first use of functional pottery vessels is thought to be in 9,000 BC. These vessels were most likely used to hold and store grain and other foods.

It is thought that ancient glass manufacture is closely related to pottery making, which flourished in Upper Egypt about 8,000 BC. While firing pottery, the presence of calcium oxide (CaO) containing sand combined with soda and the overheating of the pottery kiln may have resulted in a colored glaze on the ceramic pot. Experts believe that it was not until 1,500 BC that glass was produced independently of ceramics and fashioned into separate items.

Since these ancient times, the technology and applications of ceramics (including glass) has steadily increased. We often take for granted the major role that ceramics have played in the progress of humankind. Below are just a few examples of how important ceramics are to society.

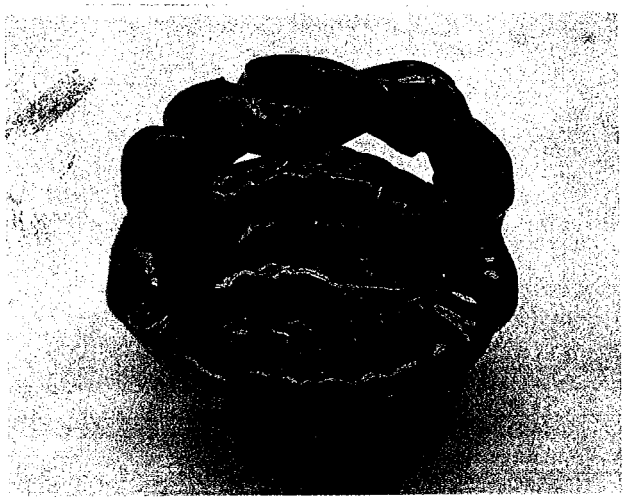
Ceramic Processing

Ceramic processing is used to produce commercial products that are very diverse in size, shape, detail, complexity, and material composition, structure, and cost. The purpose of ceramics processing to an applied science is the natural result of an increasing ability to refine, develop, and characterize ceramic materials.

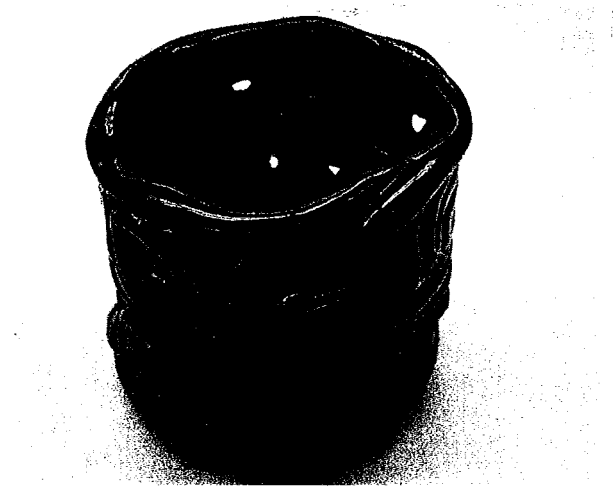
Ceramics are typically produced by the application of heat upon processed clays and other natural raw materials to form a rigid product. Ceramic products that use naturally occurring rocks and minerals as a starting material must undergo special processing in order to control purity, particle size, particle size distribution, and heterogeneity. These attributes play a big role in the final properties of the finished ceramic. Chemically prepared powders also are used as starting materials for some ceramic products. These synthetic materials can be controlled to produce powders with precise chemical compositions and particle size.

The next step is to form the ceramic particles into a desired shape. This is accomplished by the addition of water and/or additives such as binders, followed by a shape forming process. Some of the most common forming methods for ceramics include extrusion, slip casting, pressing, tape casting and injection molding. After the particles are formed, these "green" ceramics undergo a heat-treatment (called firing or sintering) to produce a rigid, finished product. Some ceramic products such as electrical insulators, dinnerware and tile may then undergo a glazing process. Some ceramics for advanced applications may undergo a machining and/or polishing step in order meet specific engineering design criteria.

Samples of Student Created Pots,



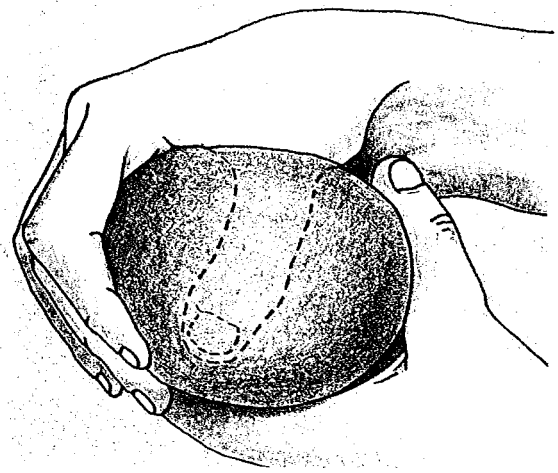
Pinch Pot, student grade 4



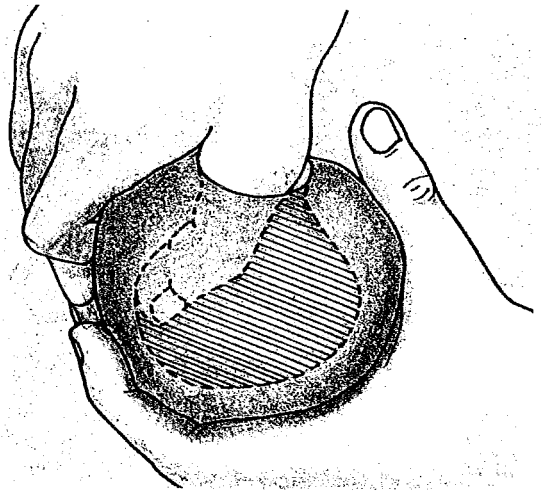
Coil Pot, Student grade 5

How to Create a PINCH POT....

One of the oldest methods of creating pottery by many cultures... Mayan, Aztec, American Indian, etc.



1. Press your thumb into the center of a ball of clay. Turn the ball, pressing the clay between your thumb and fingers.



2. Keep turning the ball, pressing the clay from the bottom toward the top.

3. Place three fingers on the top edge as you turn the pot. Make a smooth, strong edge.

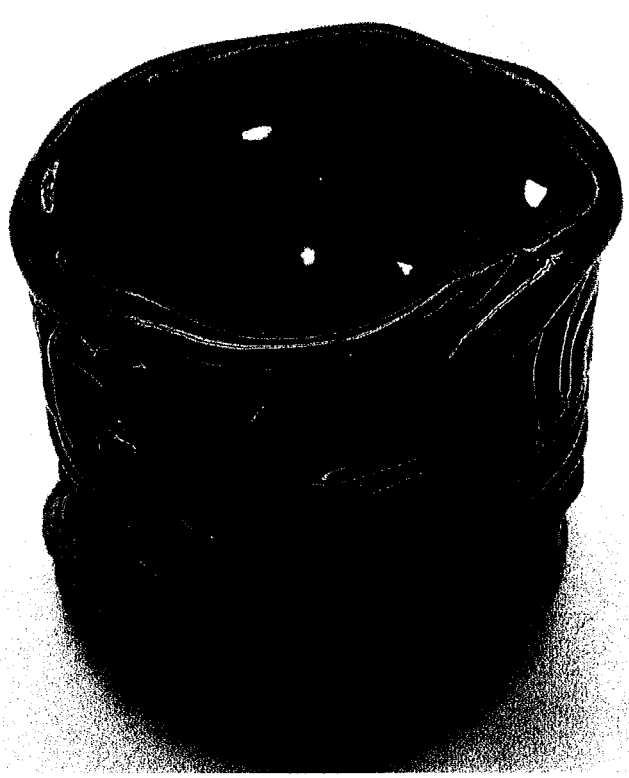
Finish the design. You might add a handle or make a lid for your pot. You can create textures or patterns on the surface.

Fun **LARGER** PROJECTS....

*....To create **together** in a **group**!*

...every classmate creates part of the finished piece...instills pride and team spirit.

- *This large coil method pot was created by a class of 24 fifth graders . I put the students in teams of three . Each created a series of "coils"...(Clay rolled into a worm or snake , then rolled into a snail like coil.) Then they brought their coils to me and I connected them together to make this pot. It stands two feet tall and eight inches wide. It is spectacular!*



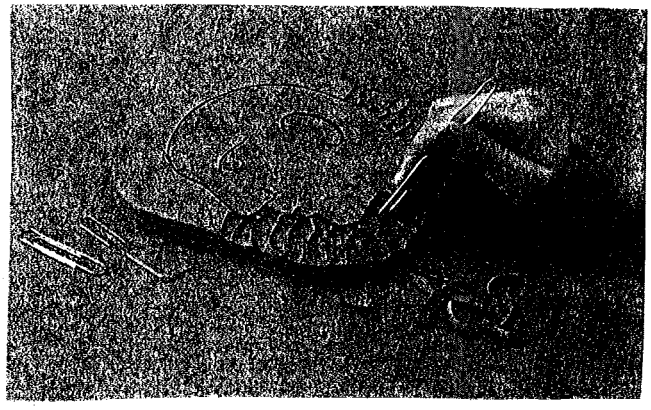
History of the Coin..

Coin design

Coins were invented in Lydia in the 7th century BC, but they were first extensively used by the Greeks, and the Greeks set the canon of coin design which has been followed ever since. Coin design today still recognisably follows patterns descended from Ancient Greece. The Greeks did not see coin design as a major art form, although some, especially outside Greece itself, among the Central Asian kingdoms and in Sicilian cities keen to promote themselves, were expensively designed by leading goldsmiths, but the durability and abundance of coins have made them one of the most important sources of knowledge about Greek aesthetics. Greek coins are, incidentally, the only art form from the ancient Greek world which can still be bought and owned by private collectors of modest means.

Greek designers began the practice of putting a profile portrait on the obverse of coins. This was initially a symbolic portrait of the patron god or goddess of the city issuing the coin: Athena for Athens, Apollo at Corinth, Demeter at Thebes and so on. Later, heads of heroes of Greek mythology were used, such as Heracles on the coins of Alexander the Great. The first human portraits on coins were those of Persian satraps in Asia Minor. Greek cities in Italy such as Syracuse began to put the heads of real people on coins in the 4th century BC, as did the Hellenistic successors of Alexander the Great in Egypt, Syria and elsewhere. On the reverse of their coins the Greek cities often put a symbol of the city: an owl for Athens, a dolphin for Syracuse and so on. The placing of inscriptions on coins also began in Greek times. All these customs were later continued by the Romans.

History of The Coin...



" Profiles in Clay"

...a relief sculpture project

A fun project to use in either earth clay or man –made clay.

For teachers who DO NOT have access to a kiln (the oven in which we fire or cook the clay) or an Art Teacher to assist... the self-drying clay or model magic which comes in mixable colors is suggested! If you have access to a kiln ... go natural!

Profiles have been around since Ancient Egypt and beyond.

The profile is a side view of the face. This project will allow us to create a lasting "relief" sculpture of our face in clay. Relief means it is not totally flat..but only has dimension on one side, the back remains flat (like the face on a coin.)

Students can create " Idealized" portraits which show an image where the artist makes features look larger or more beautiful than they really appear. They can also do a "realistic" portrait, using the reflection from a mirror to really capture qualities that show a likeness to their actual faces.

FUN FACT: Did you know that the portrait on the US Dime was created by African American Artist Selma Burke? You do now!

1. Roll out a "slab" of clay about half an inch thick .
2. Have students draw their profile using a paper clip.
3. Carve away part of the excess clay, surrounding the profile to create the relief for the sculpture.
4. Add details, patterns , designs as desired!

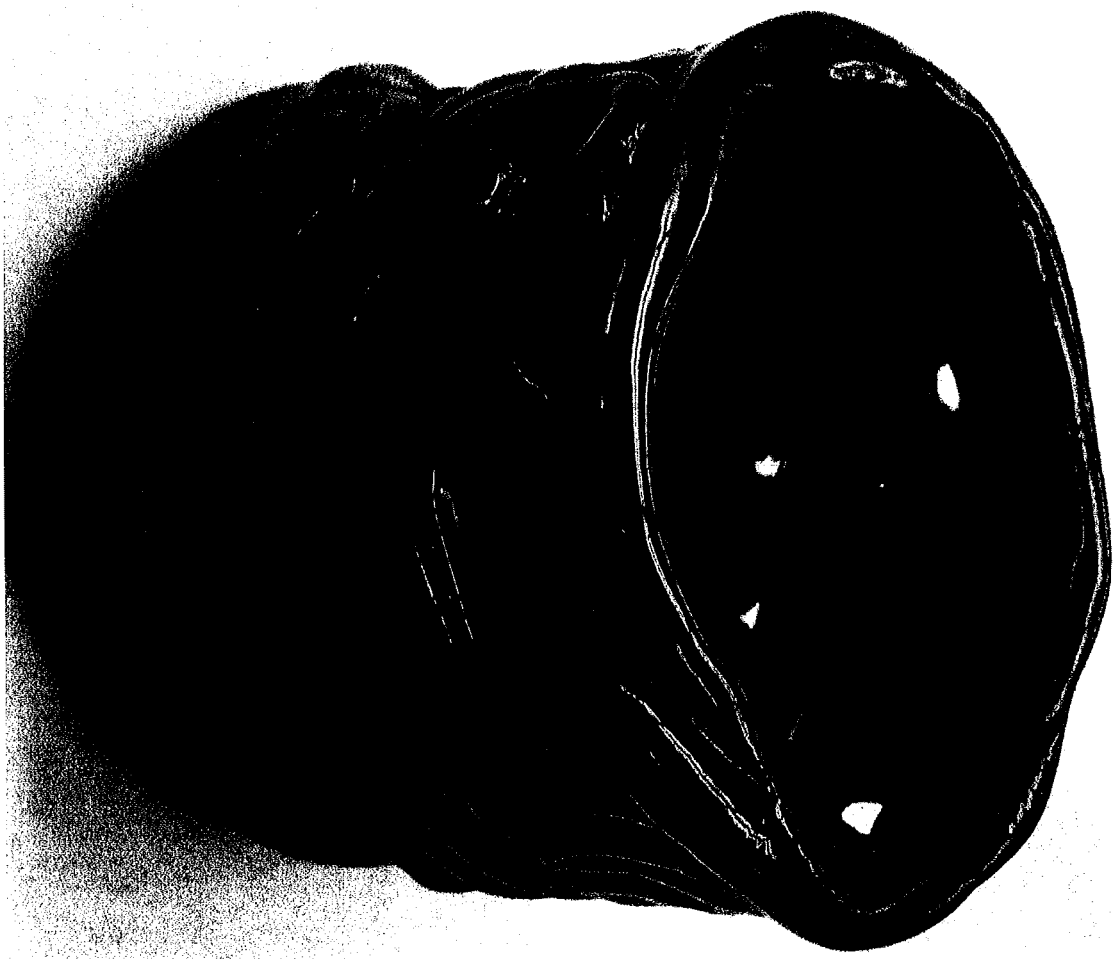
- If earth clay, must dry for a week, then be fired in the kiln.
- Finish by glazing or painting with acrillic paints...they are permanent.

IMAGES FOR REFERENCE....

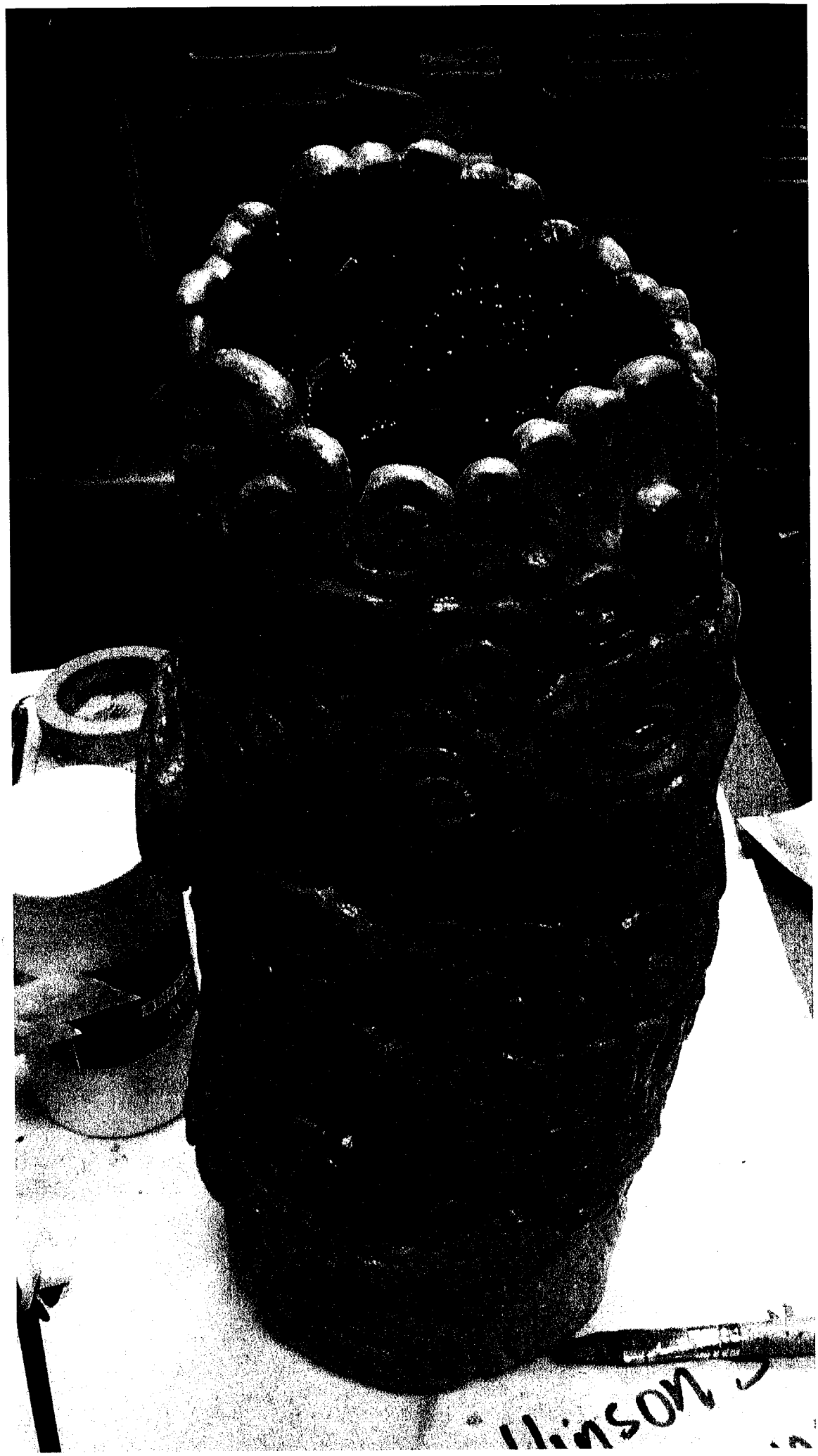
The following pages contain **photos** for your reference...they include a pinch pot, a coil pot, a life size jaguar mask that now hangs in our school courtyard, the larger group project coil pot, and a life size chimp we made as well.

Creating 3-d ceramic or clay images to complement our curriculum is always a welcome event. My students always cheer when it comes time for a " Clay Project."

Yours will too. So...whether you use "ModelMagic" or actual earth clay and fire it, the fun will still be there and the culmination of any theme or unit will be a memorable experience for all.



Crayola
WATERCOLOR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Chapman,Laura, Adventures in Art

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To apply, you must contact the teacher who developed the idea before submitting your application. Contact can be made by attending a workshop given by the disseminator, communicating via email or telephone, by visiting the disseminator in their classroom, or by having the disseminator visit your classroom.

Project funds are to be spent within the current school year or an extension may be requested. An expense report with receipts is required by June 15th.

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For more information, contact:
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