

## MOLDING THE PROJECTS

### **Preparation**

Detailed instructions for each of the clay projects can be found on the Guadalupe Home & School Club website, [GHSC.net](http://GHSC.net), under Docs & Info, Ceramics as well as in the Clay Room in the rack labeled "Project Folders." These instruction sheets specify the proper amount of clay required to make each project, list all of the tools and materials that will need to be brought to the classroom, and also give step by step instructions for the proper completion of the project. All helpers should read these instruction sheets well ahead of time. It would also be a good idea to bring one or two of these instruction sheets to the classroom for reference, but please remember to put them back in the proper folders when finished. These instruction sheets are for the parent helpers only, not to be handed out to the children.

Please plan on arriving at the Clay Room about 20 minutes before the start time arranged with the teacher.

1) Fill the bucket half-full of water and toss a couple of sponges in it. (There is a faucet handle hanging on a nail by the sample project shelves, and the faucet is under the drinking fountain between the bathrooms around the corner). This is needed for washing off hands, wiping off tables, rinsing out sponges, cleaning tools, etc.

2) Next, load all of the needed materials onto the clay cart. Depending upon the project, from two to five drying boards will be needed. They are kept under the shelves of glaze. **Use the black marker to write the teacher's name and the date on a piece of masking tape. Put the tape onto the narrow edge across the short side of the board so that it will be visible when two boards are put side by side on the shelves.** The molded projects will be left to dry on these boards until they are ready to fire in the kiln.

3) Load the box/boxes of precut clay and a couple of plastic bags for clay scrap into the shopping cart. Clay is expensive, and the school cannot afford to throw the scraps away. The Clay Coordinator will recondition the scrap clay for later use.

4) Count out one mat for each child in the class and place them into the cart.

5) The whole bucket of wooden slats can be brought to the classroom, if they are needed for the project.

6) Count out one roller for each child in the class and toss them into the bottom the ceramics cart. **IT IS STRONGLY REQUESTED THAT THE BUCKET OF ROLLERS NOT BE BROUGHT TO THE CLASSROOM**, because during cleanup, the dirty rollers will likely get tossed into the bucket of clean rollers and never get wiped off.

7) Get about 10 to 15 of the small plastic tubs for water. One tub for every two students is adequate. The water is used for smoothing out rough areas, moistening clay that has become too dry or cracked, and for joining pieces together. Count out and load any other materials that may be needed.

8) The **cutting tools** are located in a white plastic box. *These tools should be counted BEFORE and AFTER the molding of the projects.* Counting before confirms that all of the tools were present when the project started. Counting after indicates if any tools were left behind in the classroom or under the tables outside. If the count does not match, go back where the molding was done and find them.

It is much easier to do the molding inside the classroom, but it may also be done elsewhere if the teacher prefers not to have molding in the classroom (contact the Clay Coordinator for alternate locations when scheduling the molding date). Bring a spray bottle from the Clay Room. It comes in handy for spraying clay that has started to dry out during molding.

Bring a couple of the project samples from the display shelf to the classroom to show the children during the instruction and demonstration portion of the project. Please place the project samples in the small cardboard box labeled "Project Samples." It is lined with a towel to protect the samples from being broken. To avoid breakage, PLEASE DO NOT TRANSPORT THE PROJECT SAMPLES BOX IN THE CLAY CART, but carry it instead.

### **Use The Right Amount Of Clay**

Using the right amount of clay for each project is very important. The Clay Coordinator will pre-cut the clay for all of the projects. You will find your pre-cut clay in 1 or 2 plastic bins labeled with the teacher's name. Bring the whole box to the classroom, along with the other needed materials. DO NOT TILT THE PLASTIC BOXES, OR ELSE THE CLAY WILL SLIDE TO ONE SIDE AND STICK TOGETHER. Give each child only one block. Keep the lid closed to prevent the remaining clay from drying out. Do not pass out the clay until it is ready to be used. Leave unused blocks in the bin; do not put them in with the scrap. To help ensure that there will be pre-cut clay available for the project, please remember to schedule and post the molding date on the Clay calendar at least one week ahead of time.

### **Using The Mats**

These are just squares of vinyl tablecloth. Place one mat over each child's desk or workspace. They are important because the clay does not stick as well to them and they keep the desks clean. They should always be used even if the project is being done at the Media Center. *Afterwards, the mats must be wiped clean with a plastic scrub brush and/or wet sponge. Rinse the scrubber/sponges often.* Please do not just fold them dirty side in and put them back on the shelf. Nobody wants to clean up after the last class before they can begin their own project. Dirty mats get dried up clay bits all over the classroom carpeting and cause the new clay to stick more aggressively to the mat.

### **Leading By Example**

The Project Leader will need to explain the project in detail to the class. Remember that this is a learning experience for the children. When explaining the project, be sure to emphasize the clay working technique being used e.g. hand molding, rolling a slab, making coils, cutting and joining clay, etc. This is most effectively accomplished by actually demonstrating the procedure in front of the class. Although it may not always be practical, or even possible, to complete some of the more complicated projects for the class, it can still nonetheless be very helpful to at least demonstrate some of the more important techniques and procedures pertaining to that particular project. Drawing sketches on the blackboard or whiteboard can be very helpful in communicating important aspects of the project to the children. Explain to the class the various steps of drying, firing, glazing and finally firing again. Since the Kindergarten children have not

made a clay project before, assure them that when their projects are finished, they will be able to take them home.

If the children are not at their desks during the explanation and demonstration, the other parent helpers can be distributing the mats, clay, tools and tubs of water. Put no more than 1/8 to 1/4 inch of water in each tub. They can also set out the drying boards in one area of the room. If the children are at their desks, it would be best to wait until the demonstration is over before distributing the clay and tools in order to avoid distracting them. Distribute any sharp tools only when they are needed. Stress the importance of using these tools carefully. The cutting tools are very sharp. Keep any completed demonstration projects for a child who is absent or whose project gets badly broken or damaged later on.

### **Rolling Out A Clay Slab**

Most projects involve rolling out a piece of clay as the first step. This can be a very difficult step for the children, especially the younger ones, so the parent helpers will often need to help. Use two of the flat wooden slats for each student. Place one on either side of the clay. These are used to achieve a flat slab of clay of the proper thickness. Always use a clean dry roller. Before passing out the clay, roll the blocks into round balls and flatten them somewhat by hand. Working and flattening the clay by hand first softens the clay and makes the rolling go much more quickly and easily.

Try not to press down on the roller too hard to begin with; this will cause the clay to stick to the roller. Reposition the slats and roll the clay in different directions, from time to time, not just up and down. Do not reverse directions too close to the edge of the clay or else the clay will stick to and wrap around the roller. It works best to position the roller in the middle of the slab and then roll completely off of the edge of the clay and then reposition the roller to the middle. Continue rolling until the roller is firmly contacting the wooden slats and no longer leaving marks in the clay.

After rolling out the clay, remove the slab of clay from the mat by flipping it upside down over an open hand. Then peel the mat away from the back of the clay. Attempting to pull the clay from the mat while it is still on the desk or table usually results in stretched and torn clay. Air bubbles, if present, will appear as small bumps or blisters on the surface of the rolled out clay. Pierce the bubbles with the pointed cutting tool and press out the air. Roll over the spot to even it out. As soon as the clay is rolled out, remove the wooden slats and rollers from the desks and put them back into the shopping cart. If a template is being used, roll the template onto the clay before removing these tools.

### **Using The Templates**

When making a project in which a template will be used, it is important to have the children test the fit of the template on the clay BEFORE they have completely rolled out the clay. Then reposition the wooden slats so that the clay can be rolled out in the direction it is needed.

In the event that the clay has already been completely rolled out, and the template does not fit completely on top of the rolled out slab, DO NOT wad up the clay and start over. There is a simple way to fix the problem.

Lay the template over the clay. Using one of the sharp cutting tools, cut away some of the excess clay from where it is not needed. Take these scraps and lay them on top of the slab, about an inch from the edge where more clay was needed. To help join these pieces together, lightly score and moisten the scraps before pressing them into place. Reposition the slats if necessary and run the roller over the scrap and out in the direction of where the clay was needed. The action and pressure of the roller will cause the scraps to meld right into the slab. This procedure can be repeated, if necessary, until the slab has reached the proper dimensions. This is much faster and easier than wadding up the clay and starting over.

With some of the templates there may not be enough to give one to every child. This should not be a problem. Since the children take varying lengths of time to get to the point where the template is needed, they can simply take turns using them. Just distribute one template for every two or three children if necessary.

The templates used for the various projects in the ceramics program took many hours of meticulous work to cut out. Please treat them with care and respect so that they will last for as long as possible.

### **Cutting Shapes From The Slab**

The easiest way to cut the slabs of clay is with the cutting tools that look like little ice picks found in the white plastic "Cutting Tools" box. If the project calls for the use of a template, place the template on the slab and lightly roll it onto the clay, before putting away the roller and wooden slats. Then gently drag the cutting tool through the clay, keeping the tool against the edge of the template. To avoid damaging the vinyl mats, tilt the tool at a 45-degree angle, not straight up and down, so that it cuts through the clay more easily. Do not press too hard. In Kindergarten and First Grade, only the adults should use the sharp cutting tools. In Second Grade and above, the children can usually be trusted to use these tools safely, but only with guidance and close supervision.

### **Joining Pieces Together**

Many projects involve attaching two or more pieces of clay together. If not done properly, the pieces will fall apart while drying or while being fired. *To join clay together, start by gently scoring or scratching the two pieces where they will be touching.* This can be done with the cutting tool, a fork, a knife or even a fingernail. Then slightly moisten these areas with a wet fingertip. Next gently but firmly press the two pieces together with a back and forth twisting motion. This will ensure a good bond between the pieces. For joints that will have a lot of stress put on them, a thin string or snake of clay can be laid along the joint and pressed and smoothed into place. Lines or joints in the clay can be smoothed out by gently rubbing the clay repeatedly in the same direction.

### **Be Creative**

The clay projects can be textured with a wide variety of items. In the Clay Room are plastic forks and knives, various metal clay tools, wooden and plastic shaped blocks, and tooth picks. Leaves, pine needles and wheat seed heads can also be used to make impressions in the clay. (There is no need to remove small bits of needles or seeds from the clay, as they will simply burn away when the projects are fired). Plastic drinking straws are good for punching holes in the clay in order to hang the project on a wall. The

holes should be at least 1/2 inch from the edge of the clay. There are garlic presses that can be used to make hair, which is used in some of the projects.

## **Helping The Children**

Judging how much to help a child with their project can often be a little difficult. First and foremost, these clay projects are art; and as such, there is no right or wrong way to do the projects, as long as the child is learning the clay techniques and is working within the parameters outlined for that particular project. (One child should not be trying to make a pot if everyone else is making a picture frame). Each child should be allowed to express his or her own unique artistic talents. At the same time, it is important that the child be able to complete the project and wind up with something that they will be happy with. This is the job of the parent helpers. Sometimes all that is needed is an idea for inspiration. Sometimes a lot of help is required to keep the projects from falling apart or collapsing. *Rolling out slabs of clay and joining pieces together are two of the most difficult things to accomplish, and may need to be done entirely by the parent helpers in some cases. Repair any clay that has cracked or torn by scoring or scratching the torn edges, moistening them with water, and gently pressing them back together. Never allow any part of a project to be thicker than about 3/4 of an inch. Not only does it take longer to dry, sometimes air bubbles may get trapped inside the clay, especially the thicker parts. When this happens the projects can sometimes explode inside the kiln, destroying that child's project and damaging ones nearby.*

Identify each project by printing the child's first name and last initial on the bottom or lower edge of the project. If space permits, it is an excellent idea to put the month and year on the project as well. This is most easily done with the sharp cutting tool or a toothpick. Press very lightly so that the tool does not cut all of the way through the clay. Be sure that each project has the child's name clearly marked on it before it is moved to the drying board. This will prevent identification problems later on when the projects are glazed and/or ready to go home.

## **Absentees**

The Project Leader should check with the teacher to find out how many children are absent when the molding is being done. It is best to have any make-ups for the molding done as soon as possible so that they can be fired along with the rest of the class. If the teacher does not want the child pulled from the class, the make-up work can be done during lunch or sometimes after school, with the parent's permission of course. The Project Leader should determine ahead of time if he or she is planning to have make-ups. If it is decided that make-ups will not be done, then make sure that the parent helpers or a child who finished early make enough extra projects so that each child will have a project to glaze. Don't forget to write the names of the absent children on the bottoms of the projects. Then make an extra one to cover any broken or damaged projects. Just put the date on the bottom of the extra project to distinguish it from one that belongs to a specific child.

## **Clean Up**

After the molding has been completed, have the children pick up any bits of clay that may have fallen onto the floor. They can also help bring mats and other materials

back to the clay cart. Thoroughly clean all clay residue from the desks with the damp cloth towels or sponges and CLEAN WATER back at the clay room.

COUNT THE TOOLS IN THE WHITE PLASTIC BOX! The correct count is listed on a piece of paper taped inside of the lid. If the count does not match, look under and around all of the desks until the missing tools are found. The clay cutters are very sharp, and can cause serious personal injury to a child if found lying on the floor. THIS IS YOUR RESPONSIBILITY.

It is strongly recommended that the drying boards with the finished clay projects be CARRIED BY HAND back to the Clay Room. The shaking and vibration generated by the clay cart could shake loose and topple some of the clay projects. The boards should be placed on any of the empty shelves in the middle of the Clay Room and **add the number of projects on each board to the tape label.**

All mats, rollers, tools, tubs and anything else that was used must be cleaned after each use. (The wooden slats usually do not require and cleaning). This is most easily accomplished back in the Clay Room with a scrubber/sponge/wet towel and a bucket of water. Please make every effort to put things back in the same location and condition (or better) as they were in before they were used. The white plastic bucket next to the small kiln is for trash. The bucket of dirty water can be dumped on the grass behind the clay room or into the planters near the drinking fountain. DO NOT DUMP THE BUCKETS INTO THE TOILETS. Overlooked items such as knives, forks and tools might get dumped into the toilet along with the water. Also, the clay backs up the pipes.

## **The Next Step**

The clay must dry for two three weeks after it is molded before it can be fired in the kiln. The kiln is capable of firing the projects of several classes at the same time. In order to avoid firing the kiln with only a partial load, it is sometimes necessary to wait for another class's projects to dry a little more so that they can be fired at the same time. If a glazing date has been entered on the Clay Calendar, it can be assumed that the projects will be fired and ready to glaze by the posted date. Otherwise the Project Leader will be notified when the project has been fired.