



WHEEL THROWING:  
A GUIDE FOR BEGINNERS

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# CLAY BODIES

## STONEWARE

- Gray or red coloration
- Relatively inexpensive
- More forgiving
- Able to be once or twice fired
- Fired to cone 8-10

## PORCELAIN

- Off-white coloration
- Slightly more expensive
- Less forgiving
- Primarily twice fired
- Fired to cone 8-10

# PREPARATION

## CUT THE CLAY



Begin by cutting off a chunk of clay with a wire tool. The mass of clay should weigh approximately 2 pounds.

## ROLL INTO BALL



Roll the clay into a ball. The ball should be roughly 4 inches in diameter if 2 pounds of clay is used.

## TROUBLESHOOTING

Two pounds of clay is an ideal amount to begin with. Large amounts of clay are difficult to center. Small amounts, on other hand, are troubling because they are difficult to control. This is especially relevant with individuals with larger hands.

# PREPARATION

## WEDGING



Using the palms of your hands, push the clay away from your body with a slight downward force. Roll the clay towards you and repeat the “scooting” motion previously mentioned.

## RAM’S HEAD



Repeat these steps at least 20 or 30 times, or until you no longer hear bubbles popping. The mass of clay should somewhat resemble a ram’s head, such as the image above. Once the clay is wedged, ball it up into a spherical shape.

## TROUBLESHOOTING

When wedging, too much pressure can cause the clay to fold over on itself and create air pockets. The clay should be pushed nearly parallel with the table, and a small amount of downward force should be applied.

# CORRECT POSTURE

## TRIPOD POSITION

### TROUBLESHOOTING

If your body is positioned too far backwards, it is difficult to create enough leverage. You want to be in full control of the clay body.



Correct posture and hand-positioning are the key to centering clay. First, place your elbows in between your inner thighs. Now sit close enough to the wheel so that your center of gravity is acting as an anchor.

# WHEEL PREPARATION

## APPLY WATER



Now apply a small amount of water to the wheel head or bat. There should not be visible standing water. If so, use a sponge to absorb excess water.

## APPLY CLAY



With some force, drop the clay in the middle of the wheel head as close to the center as possible.

## TROUBLESHOOTING

Wheel speed will determine how quickly you can manipulate the clay. A wheel moving too fast will cause the the clay to collapse in on itself due to the centrifugal force pushing the mass outwards.

# SEALING

## APPLY WATER



Absorb water into a sponge. Raise the sponge over top of the ball of clay, lower you pinky finger allowing it to act as a spout, and squeeze the sponge. This is the first application of water, and the clay, if taken directly from a bag, will need a considerable amount of water

## SEAL



Accelerate the wheel head to a moderately fast speed. Now take both pinky fingers, rest them on the wheel head, and against either side of the base of the clay. Press inwards with your pinkies and support the mass of the clay with your palms and fingers.

## TROUBLESHOOTING

Setting the wheel speed will become second nature through trial and error. Typically, a fast wheel speed is necessary to center, while a slower one is used for the purpose of pulling.

# CENTERING

## HAND POSITION



The clay must now be centered. Accelerate to wheel to a considerably faster speed. Keeping the same tripod posture, To do so, wrap your left hand, if you are right-handed, around the left side of the clay while pressing inward. Lock your thumbs together, and hover your right hand over-top of the clay.

## NO WOBBLING



This will take practice. The right amount of pressure from both the side and the top is required. Begin to press downward with the palm of your hand until the clay is no longer wobbling, and it forms a cake-like shape.

## TROUBLESHOOTING

An adequate amount of moisture must be maintained at all times. Keep a bowl or small bucket of water next to the wheel head. The clay will become "sticky," and your hands will grab if water is needed. Your hands should glide across the surface of the clay.

# CENTERING

## TROUBLESHOOTING

Strive to produce a perfect cone shape. If a spiraling effect forms on the surface of the clay, then you are moving too quickly. A pit on the top the cone is a common occurrence. If this happens, continue to support the clay with one hand, and shape the tip of the cone with the opposite hand. Creating a gradual dome before coning can help prevent this.

## CONING



Using the palms of your hands, press inwards from both directions until the clay begins to rise upwards. Keep the same amount of pressure and slowly lift your hands upwards.

## REPEAT



The clay should then take on a shape similar to that of a cone. Return to a cake shape, and repeat this step a minimum of three times.

# OPENING THE CENTER

## CREATE A DIVOT



Return the clay to a cake shape once again. Touch the fingernails of your thumbs together as if to make an “M.” Center your thumbs in the clay, and support the outer walls with your fingers. Press your thumbs into the center about a half of an inch.

## LUBRICATE



Fill the divot with water, and, using the same hand posture, bore the hole deeper into the clay.

# TESTING DEPTH

## TEST BASE DEPTH

3/8" DEEP

### TROUBLESHOOTING

Support the walls of the cylinder when possible. This helps prevent the walls from flopping outward due to the centrifugal force, as mentioned before.



Once you near the bottom, release your thumbs and stop the wheel. Retrieve a needle tool and stick it into the center of the hole and stop once it hits the wheel head. Guide your index finger down the needle tool until it touches the clay. Keep your finger in place and pull the needle tool from the clay.

The measurement will be from the tip of the tool to the tip of your finger. A depth of 3/8" to 1/2" is ideal.

# BASE AND WALL CREATION

## CROSS SECTION



For educational purposes, this cross section displays the correct wall and base thicknesses.

## PULL OUTWARD



Slow the wheel to a much slower speed. Place your thumbs back into the hole in the clay and start pulling the inner walls, outward. Continue this outward motion until the base reaches the desired width.

## TROUBLESHOOTING



Compression of the base is crucial. Failure to do so can result in "s" cracking, in which a crack extends from one side of the base to the other in the shape of an "s."

# PULLING

## CROSS SECTION



Here is a cross section after completing the second stage prior to pulling up the walls.

## INDENT AT BASE



Create an indentation at the base of the outer wall with the tip of your thumb. The indentation should cover about half of your thumbnail.

## TROUBLESHOOTING

The images of cross section are merely to show you the thickness of the walls and base at each particular step in the process. Although, they can be useful if you are unsure of how much clay is remaining at the base or in the walls.

# PULLING

## SUPPORT INSIDE



Support the base of the inside wall with your index and middle finger.

## BEGIN PULLING



With your opposite hand, create a hook with your index finger. Place the the first nuckle of your index finger into the indention created.

# PULLING

## ELEVATE



Do not rush this step. **SLOWLY** begin to elevate your fingers. Make sure that you are keeping your fingers directly apart from each other as you pull up. The mass of clay above your outside finger should begin to rise.

## LEAVE LIP THICK



Pull the clay up until just before the lip of the cylinder, and slowly release.

## TROUBLESHOOTING



If the piece begins to wobble and work itself off center, slow down the wheel, wrap your thumbs and middle fingers around the base of the clay, and slowly move upward. Repeat if necessary.

# PULLING

## COMPRESS LIP



Support the lip with your thumb and index finger. Use the index finger on the opposite hand to press down onto the lip to compress it.

Repeat the previous three steps until the wall of the cylinder, from the base to the lip, is around 3/8" thick. Strive to achieve this thickness in around three pulls.



PULL #1



PULL #2



PULL #3

# FORMING THE LIP

## POINTING UP



Forming the lip is a similar process to compressing the lip. Support the lip with your thumb and index finger. Use the index finger on the opposite hand to press down onto the lip and use as a guide when shaping.

## ROUNDED LIP



The knuckle rather than the finger tip can also be a useful tool for lip manipulation.

## TROUBLESHOOTING

The shape of the lip can drastically change the appearance of a piece. Try different lip shapes for various applications. The shape of the piece will often dictate what the direction and shape of lip should be.

# FORMING THE LIP

## POINTING OUT



Press outwards with the inside finger, and support with the outside finger to create a lip facing pointing outward.

## POINTING IN



Conversely, press inwards with the outside finger and support with the inside finger to form a lip pointing inward.

## TROUBLESHOOTING



Create a beveled edge by using your index finger as a guide for the desired degree.

# COMPRESSION

## RIB COMPRESSION

### TROUBLESHOOTING

A plastic rib or even the tip of a finger are also options if a metal rib is unobtainable.



Retrieve a metal rib and hold it at a 45 degree angle to the cylinder. Beginning at the base, apply a small amount of pressure, and slowly work upwards.

# SPONGE APPLICATIONS

## SMOOTHING



A sponge can be used to smooth the surface of the clay. Simply apply a small amount of pressure to the clay with the sponge, while moving it straight up and down the cylinder.

## TROUBLESHOOTING

The sponge is also picking up moisture when smoothing. This moisture is known as slip. Removing the slip will cause the piece to dry out more rapidly, but leaving the slip can create an interesting effect. Keep in mind that the moisture must be removed from the inside of the bottom of the cylinder. If you fail to do this, “s” cracking may occur.

# REFERENCES

Copperplate Gothic Light  
Arial

Adobe InDesign



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